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Farm · Home · School

Everywhere!



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A New Approach to Farm Problems

A new trend is appearing in Canadian agriculture. In the past our governments, colleges and farm groups have usually taken the initiative in gathering and passing along information that will help the farmer improve his lot. But industry has discovered that it, too, has a lot to contribute to this end. And in some places it is doing all it can, not only to increase its contribution, but to help other agencies increase theirs as well.

This is not a piece of propaganda for business interests. We merely want to call attention to the fact that some leaders of industry have raised their sights very high. They see that the best way for them to build profitable markets is to help the farmer improve his returns. One means of doing this is to improve their own products and to cut their costs, so that farmers will get better value for their money.

But their possible contribution does not stop there. Some of these industries have service men whose job it is to see that sales are increased. They can do this only if farmers are satisfied with their products—in other words, if farmers believe these products are worth more than they cost.

Sometimes these service men who, in the course of their work see many farms of all kinds, are able to point out ways for a farmer to increase his returns. And the present trend is to increase the knowledge of these service men, so that they can offer more useful suggestions.

One of the undisputed leaders in this movement is the Canadian Feed Manufacturers' Association, Eastern Section. Last year this organization organized a Nutrition Conference at Macdonald College, to iron out prob-

lems and enable their men to improve their service to farmers. It was such a success that a similar conference was arranged this year. It, too, was an undisputed success.

This conference brought together feed manufacturers, service men, government and college officials, scientists and leading producers, to discuss all angles of the nutrition picture. It showed them that their common interest lay in improving farm returns, and that this could best be done by all of them working in close co-operation.

It did more than this. Cast in a wide educational mould, the conference showed that no farmer could get the greatest value from feed unless his animals were well bred, healthy and efficiently managed. And it offered valuable suggestions for improvements along each of these lines.

This second Nutrition Conference marked out a pattern that can be followed in the future. The feed men intend to follow up on their promising start by making these conferences annual events. These will, in themselves, be big contributions to Canadian agriculture. But even more important is it that they have set a pattern that can be followed in other fields. And they have offered a direct challenge to other industries to make similar contributions.

Our Cover Picture

The photo of the teams working in second growth alfalfa was taken on the College farm by Walter Whitehead.

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A lively moment during the question period, with Dr. Crampton as chairman. Left to right are Dr. Paul Bernier, Dr. J. L. Lush,



Dr. L. C. Norris, Dr. Crampton, Prof. J. R. Cavers, Prof. S. J. Slinger and J. R. Pelletier.

It Takes More Than Feed

Unless animals are well cared for and healthy they can't make very good use of their feed. So this year's Nutrition Conference considered breeding, management and disease control, as well as feeding.

ANY good farmer knows that livestock feeding involves considerably more than giving his animals something to eat. He must supply them with materials that will enable them to do their jobs cheaply and well.

And there are a lot of different jobs to be done. Every class of livestock has a piece of work different from any other, and requires special materials to turn out a good volume of its finished product at a low cost—whether it's milk, beef, bacon, wool or eggs. And even within one class of stock there are different stages. The growing calf has different needs from the milking cow, and the in-calf heifer and the dry cow also offer special demands.

These matters alone offer plenty of room for study. But the problems involved in livestock feeding don't stop there. And much of the time at the recent Nutrition Conference at Macdonald College was devoted to things just as important to the farmer as the feed itself. This conference, organized by the Eastern Section of the Canadian Feed Manufacturers' Association brought together men who could answer most of the questions in all of these fields. There were specialists in breeding, in animal health, in farm management, and in marketing, to round out the discussions on all aspects of livestock raising.

There were also men who are advancing the frontiers of knowledge in animal nutrition, who are making it possible for feed manufacturers to turn out better products at lower costs. So broad and varied was the roster of subjects that even the top experts in one field were enthusiastic students in other sections of the program.

Here's a sample slice of the program. Dr. Jay L. Lush of Iowa State College, one of the world's top authorities on the genetics of livestock, spoke on the effect of heredity on results from farm animals. This was followed up by Dr. E. W. Crampton of Macdonald College with a talk on the reproductive cycle and its relation to nutrition of the female. Professor A. R. Ness of Macdonald College went on to discuss the dairy cow's needs during pregnancy. Professor I. R. Bierly, Cornell University, showed how New York farmers had been able to cut costs through re-arrangement of their stables. And Dr. C. A. Mitchell, Dominion Animal Pathologist, described the role of veterinary medicine in supplying food for the world.

Other speakers went into various aspects of breeding, feeding and marketing, and their effect on the farmer's returns. For three days and two evenings the conference listened and discussed until it was fairly bursting at the seams.

No matter how little knowledge a man took there, he couldn't help taking considerable away with him. And no matter how much he had at the beginning, he was sure to learn a few things. The field of livestock production is so vast that no one can hope to keep up with all its complexities. And this conference gave them a chance to learn of the most important advances in each field from men who helped to make these advances.

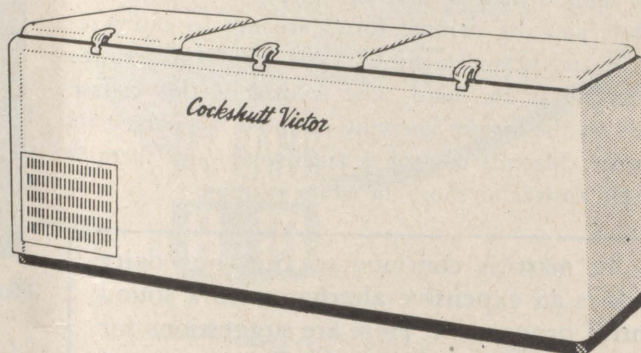
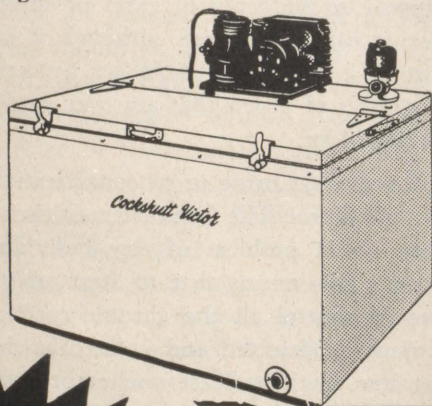
All these men have gone back to their work with more knowledge, more enthusiasm and more conviction of the importance of their jobs. Out of this combination, and a spirit of co-operation that jelled at the conference, should come results that will help every Canadian farmer.

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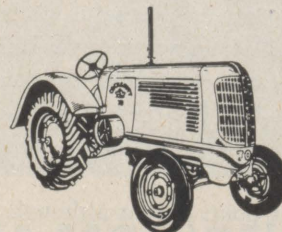
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Let's Consider Mastitis

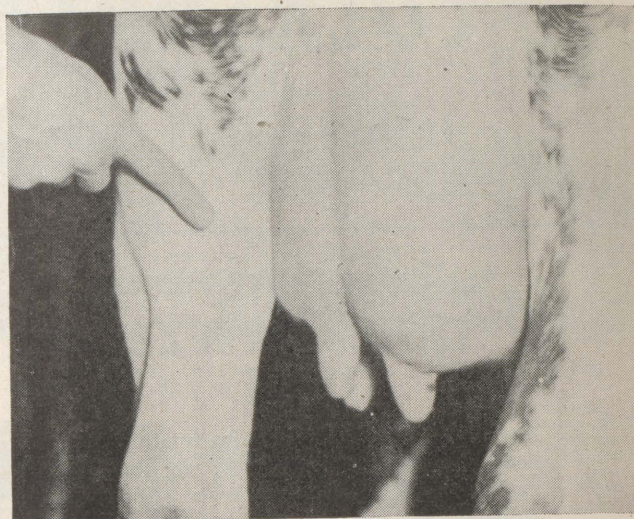
EVERY dairy farmer knows that a cow is no better than her udder. Many have also learned that an inflammatory disease of the udder, known as garget or mastitis, ruins a large number of valuable dairy cattle. Mastitis may be present in a herd in two or more forms. The acute form, which causes a sudden inflammation of the udder, with heat and swelling, and which stops the flow of milk, is well known and easily recognized. The less acute and the chronic forms are not so easily recognized; and it is the chronic type which perpetuates the infection in the herd. The control of this disease depends on the farmer knowing essential facts about its occurrence. Mastitis control is team-work, and there is no simple answer or short-cut to its solution.

To let mastitis continue to ruin our dairy herds is an expensive alternative to a sound control programme. Here are suggestions for such a programme, from the Department of Animal Pathology at Macdonald College.

Let us look at a few bald facts, some of which are not pleasant to consider. First, it is known that as the age of any herd of cows increases, the occurrence of mastitis increases in parallel. In other words, the older the cow the greater chance there is that she will be a mastitis case.

The next point is that there is a tendency for farmers to believe that the complete answer to their mastitis problem is the discovery and use of a new drug. Unfortunately this is not correct. Penicillin in its various forms is probably the most efficient agent we have ever had for destroying the germs in the udder, and as such it is an extremely useful weapon. However, it is of very limited use in acute cases. Even when it is used to treat such cases as soon as the heat and swelling have subsided. It will not control the disease unless aided by a full programme of accurate diagnosis and preventive measures.

The next point is that although a healthy, uninjured udder is highly resistant to infection, even simple injuries to teats or udder tissue will bring on high susceptibility to invasion by the germs of mastitis. The most important part of the udder, for disease resistance, is the small roll of muscle at the end of the teat, known as the sphincter, or streak canal. This is formed by a circle of protective tissue that keeps the end of the teat closed and stops the entrance of any foreign material. However, if it is injured by being tramped on, by rough handling, or by the creeping action of milking cups that are left on the cow too long, the defence of



Here mastitis has attacked the left rear quarter, shrinking it to less than half its normal size.

the udder is broken down and invasion by germs is easy.

One might ask where the germs come from and why they appear so suddenly in cases of injured teats etc. This is not easily answered, although it is certain that the chronic cases in the herd act as carriers and are potent sources of germs that are ever ready to invade a susceptible udder.

These few facts bring us to consideration of the programme of control. The fact that mastitis is a herd problem, and not a problem of any individual animal, is now clear. This means that to start an improved programme of control all the chronic carriers of mastitis germs must be detected and isolated at the end of the milking line, with at least one empty stall separating the healthy animals from the germ carriers. Such infected animals should, of course, be treated properly, and both in this and in the diagnosis, your veterinarian's service is essential. Quite often the treatments can be carried out by the owner or herdsman after the appropriate drugs and equipment are supplied to them, but the diagnosis of chronic carriers calls for professional service.

Even after four or more injections of liquid preparations of penicillin or sulpha drugs, or solid bougies of penicillin, a few cases fail to respond. If these cows have what are known as indurated udders they are a menace to the rest of the herd and should be discarded as soon as possible, or, if they are valuable breeding animals, they must be kept in isolation.

Once the infected cows, which were the main sources of the germs, are cured, removed or isolated, the programme of prevention of further cases is simplified. But

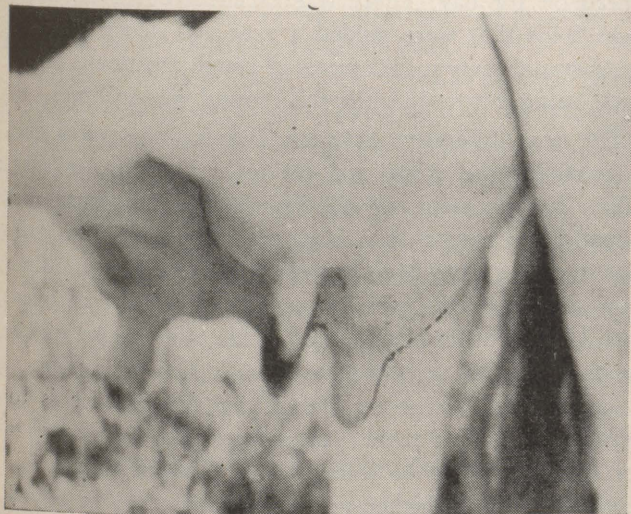
certain measures must still be carried on by the owner. The prevention of injuries is most important. If stalls are too close or are built in some other way that makes the tramping of teats by a neighbouring cow possible, then the stalls must be improved. One way to see the importance of preventing injuries is to watch cows being killed in an abbatoir and to examine the udders and teats when the animals are being skinned. In a good percentage of cases it is quite apparent that the cow was shipped because she had one or more bad quarters; and quite often the affected quarter has a teat showing the scars of an injury.

In addition to accidental tramping of teats we also find injuries caused by poorly built gutters in short stalls. Cold floors without good clean bedding, and cold draughts on the udders from poorly made doors or windows, also bring about susceptibility to mastitis.

In planning any changes for next winter all these things should be taken into consideration. The cost of improving stalls and giving the cows greater protection will probably be far less than the value of one good cow that might have to be sent to the abbatoir as a "canner" because of mastitis.

If, in spite of all precautions, injuries to teats do occur, then they should be very promptly treated. We suggest that you get a supply of sulphathiazole ointment from your veterinarian so that even very small injuries to teats can be looked after without delay.

The process of disinfecting the teats before milking—and this means about one minute before milking starts—must be carried out as a strict routine. Warm chlorine solutions are often used and more recently a group of very efficient disinfectants, known as quaternary ammonium compounds, have come into use for this purpose and seem to be very effective. Hands and milking machine cups must be disinfected well—and this involves



This cow's left front quarter is shrivelled and hard as a result of mastitis. It will never milk again.

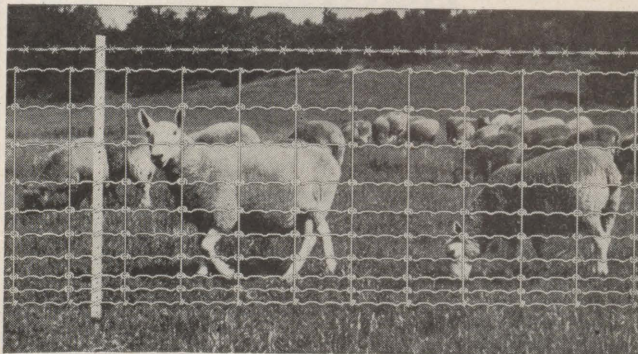
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more than a rapid and careless dip in the solution. It must be done carefully before each cow is milked.

Not only does this process remove dirt from the teats and stop the carrying of infection from one cow to another, but it also causes the let-down of the milk at the right time. This "let-down" is brought on by a nerve message from the teats to the central nerves which then send back a return message which causes a sudden rush of blood to the udder and the squeezing of the milk out of the milk cells and down into the milk cistern.

Rapid milking is important; after $2\frac{1}{2}$ or 3 minutes the nerves get tired and the flow decreases; this causes the cups of milking machines to creep upwards and results in injured teats. It is suspected that even very slow hand milking contributes to mastitis.

The daily use of the strip cup to detect thick or flakey milk is a very useful measure. While chronic cases do not always show up by this method, sufficient of them can be detected so as to make the method very well worthwhile. The first one or two streams from each teat should be squirted onto the screen of the cup immediately before milking starts. Any cow showing abnormalities should go to the end of the line, and should be milked last. When proved clear of infection after treatment she can go back into the line.

The question of how to handle acute cases remains.

When a quarter flares up the animal should be placed in a well bedded box-stall immediately. Even if only a few drops of fluid can be withdrawn at one time, she should be milked out five or more times per day. Massage with ointments, milk liniments or camphorated oil, very frequently during the day, is essential. Hot poultices might help. Such cases must be watched for signs of a high body temperature, indicating general blood poisoning, and if any such signs are detected no time must be lost in having her properly treated with one of the new drugs now being used by veterinarians on a restricted basis.

Macdonald College is continuing to cooperate with veterinarians in the laboratory diagnosis of chronic mastitis and is carrying on continual study of new treatments for mastitis. We have observed that the one programme which has worked successfully has involved accurate diagnosis by a veterinarian, followed by local treatment of infected udders, then a definite programme of prevention and care of injuries, sanitation and the nursing of acute cases by the owner, as listed above.

If this was a minor disease we would say that this seems like a difficult programme. Actually it is not difficult, and the expense is not great when compared to the returns. To let mastitis continue to drain profits is an expensive alternative to a sound programme of control.

Ladino Clover Makes a Sale

"After the results we've had with Ladino clover we don't need to wait six years to tell people we like it." That's what J. A. Ste. Marie, superintendent of the Dominion Experimental Station at Lennoxville, Quebec,

had to say about this forage crop that has become so popular in the United States and Southern Ontario.

Mr. Ste. Marie had taken a number of farmers and agronomes out to see a couple of fields seeded to a ladino-timothy mixture—one being pastured, and one fenced off for hay. There was excellent cover on both these fields that were seeded a year ago—even though the pastured section had received rough treatment from cattle being put on it while the ground was still wet.

The real difference between ladino clover and the common legume crops, red clover and alfalfa, is that ladino has no stem, all the leaves growing from the crown. This results in a high percentage of leaf and that in turn gives a high protein level. Last year's ladino crop at Lennoxville was 22 percent protein, compared with 12 percent for alfalfa. And in the plots it gave yields up to 6 tons per acre, compared with $4\frac{1}{2}$ for alfalfa.

In Vermont and New Hampshire the practice is to pasture ladino for three years, then take hay from it for the next three or four. When this practice is followed there is a thicker growth than when it is hayed right from the start.

Ladino seed costs \$2.50 a pound, but as it is seeded



These Shorthorn heifers have no trouble finding plenty of good grazing in this ladino-timothy pasture at Lennoxville.

at the rate of only 2 pounds an acre, and since a stand should be good for six or seven years, this doesn't cost any more per acre than many other mixtures.

For farmers who want to sow ladino for pasture Mr. Ste. Marie suggests sowing the regular oat crop at $2\frac{1}{2}$ to 3 bushels per acre, plus 2 pounds ladino and 8 pounds timothy. Then fence (electric fencing is cheap and effective) and pasture it after the oats are 10 inches high, or before heading. It can usually be pastured up till the middle of September without hurting the stand, but the exact time depends on the fall.

For meadow, Mr. Ste. Marie suggests early seeding at the same rate with timothy, oats and barley, so that the crop will have a good chance to get its roots established, to withstand heaving.

Ladino, he said, benefits from heavy fertilization. But the tests at Lennoxville have not been going long enough to show what particular fertilizer suits it best. Anyway, it can stand plenty of manure, both before seeding and every two or three years afterward.

From the fine stand that we saw on the poorest field of the Lennoxville farm, ladino clover certainly has considerable to offer to Eastern Townships farmers, particularly those who have little luck with alfalfa.

They Balance Their Production

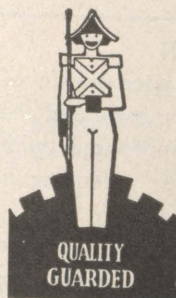
While it is a well-recognized fact that good dairy farmers should plan their breeding programmes so that they will be able to maintain a steady flow of milk and cream to the distributing plant or creamery 12 months of the year, many seem to be unable to manage their herds in such a way that this is possible. As a result, their shipments are at a peak in summer and hit bottom during the winter months. Consequently, distributing plants are often at a loss to know how to fill the demand of their customers, and creameries, too, have to adjust their manufacturing programme in accordance with the supply of cream received daily.

Ronald Chisholm and Sons, Brierly Brook, Antigonish County, seem to know the answer to the question of how to maintain a steady supply, according to S. J. MacKinnon, Agricultural Representative. The Chisholms manage their farm so efficiently, and have the production of their 25 cow herd so well balanced, that they ship practically the same amount of milk in winter as in summer. This will be of particular value to them this year since the distributing plant which they patronize are putting their shippers on a 50-50 quota this year—that is to ship the same amount in summer as in winter.

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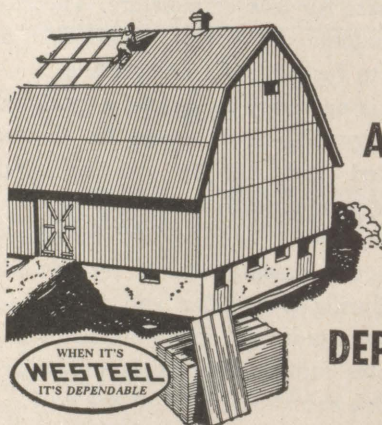
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It's Not Really A Poor Cousin!

Fall rye is really a versatile crop. It will provide emergency pasture, green manure or grain — whichever is most needed to carry livestock and keep the land in good condition.

by A. A. Hanson

FALL rye is often considered a poor cousin of the more important cereals—wheat, oats and barley. But it is becoming more widely appreciated, with the growing realization that good pasture means profitable milk production.

Where natural or so-called permanent pastures are depended upon to meet the needs of a dairy herd for the entire grazing period, very serious difficulties are often encountered. Such fields may be backward in the early spring, and their production invariably drops during midsummer droughts. Likewise, recovery in the fall may be wholly inadequate.

Improvement of these permanent pastures by applying fertilizers and lime provides only a partial solution to the problem. While such treatments increase the yield, they also tend to accentuate the peaks in production; and commercial fertilizers can scarcely be expected to compensate for lack of moisture. Therefore, many weeks will undoubtedly remain when even improved pastures fail to furnish sufficient grazing.

Careful planning is necessary to ensure a continuous supply of juicy herbage. Where it is possible, shortages should be anticipated, and met by growing supplementary crops. Fall rye, seeded in the first part of August at from one and a half to two bushels per acre, will lengthen the grazing season by providing additional pasture during September and in the early spring. Fall rye is winter-hardy and well adapted for pasturing, as it grows rapidly and stools profusely to form a relatively thick sward.

One should keep in mind that, at their best, supplementary crops are an expensive undertaking. Thus the possibility of maintaining production through the use of seeded pastures should be thoroughly investigated. In this regard, short term pastures consisting of larger plants such as timothy, red clover, alfalfa and ladino are very useful when located on favourable sites.

But fall rye will give some return on soils that are too infertile or acid for legumes. Under these conditions the need for supplementary pastures and green manuring is apt to be the most pressing.

What crop will be the best, and whether the land should be green-manured will depend on several things. The supply of organic matter in the soil is of prime

importance. Once it has been almost exhausted, by erosion and continuous cropping, yields are restricted and in extreme cases even the response to commercial fertilizers is reduced. Basic steps in maintaining fertility include the frequent use of legumes in the rotation and returning organic matter with barnyard manure and crop residues. These practices are frequently curtailed, however, by insufficient manure and the inability to obtain good stands of red clover. In addition, the situation is complicated by long, narrow farms where it is difficult to haul manure to the back fields. Under these circumstances crops grown as green manure may prove



Professor L. C. Raymond inspects a promising seed crop of Horton fall rye.

to be a practical method of restoring fertility. While the legumes are excellent green manure crops, the expense of establishment and their value for feed will

determine whether the operator can afford to plough them under.

Fall rye will serve as an effective green manure, as it is a good source of organic matter and nitrogen when properly handled. Seeded in early August, it may be turned under either in the fall or spring. Where the top growth is not over twelve inches it is possible to disk rather than plough, provided the disking is thorough enough to kill all the rye plants. This type of cultivation leaves the organic matter near the surface in a position to protect the soil from erosion. On light upland soils that are subject to washing there is a strong argument for disking rye in the spring.

The maturity of the crop when it is turned under must be considered, especially if the nitrogen content of the soil is low. Ploughing down a heavy growth of mature rye or appreciable amounts of other coarse strawy residues will seriously retard the growth of following crops, for then the numerous decay organisms will compete with the growing crop for the supply of available nitrogen. This can be overcome by applications of a nitrogenous fertilizer, or by ploughing the rye when it is still immature. In any case, as much immature rye as possible should be turned under, as the top growth contains far more organic matter and nitrogen than the roots.

Fields that have been partially summer-fallowed for weed control may be seeded to rye either for pasture or green manure or both. The various ways in which fall rye is used (pasture, winter-cover, green manure, or grain) certainly justify its recognition as more than just a poor cousin.

Avoid Bloat on Legume Pasture

Feeding grain, dry hay or silage before putting cattle on legume pasture will help prevent over-eating and, in turn, bloat.

Bloating apparently is entirely a physical problem. It is caused not because sweetclover, red clover and alfalfa contain a "poison," but rather because cattle eat too much of these legumes in too short a time.

Regardless of what cows eat—hay, grain, bluegrass or legume pasture—gas is continually forming. Normally, a cow through belching from time to time rids herself of the gas.

But, in bloat, the theory is that a cow turned on succulent green legume pasture loads up so heavily and gas forms so rapidly that the opening of the esophagus into the rumen is closed and she can't belch.

To help keep cattle from loading up too fast, turn cows on grass pasture for half an hour or more before turning them on the legume.

Another aid is to let cows drink before going onto the legume, and if they have loaded up quickly, not to let them finish filling up with water after feeding.



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Budding and Grafting Fruit Trees

Budding and grafting offer quick means of changing unproductive apple orchards over to improved varieties that yield well and are in keen demand on domestic and world markets.

by A. N. Nussey

THE natural way to propagate apple trees would be by planting apple seeds. But since the apple does not come true from seed there is a very small chance that we would get trees from seed which would produce fruit resembling that of the parent tree.

Some varieties of apple and crab-apple produce seedlings of very uniform growth habit and vigor, but the fruit is of no commercial value. These types are now used extensively in the propagation of standard trees of commercial varieties, either by grafting or budding.

The seedling rootstocks may be purchased from a nursery or they may be grown from seed of known parentage. When the seedlings are about $\frac{1}{4}$ inch in diameter they are ready to bud or graft.

The grafting of seedlings is usually done in late winter or early spring. If the seedlings have been dug in the fall and stored in a cool place in moist sand they can be grafted to commercial varieties in January or February using the whip-grafting or cleft-grafting methods. If the seedlings are allowed to remain in the nursery row over winter they can be grafted in April or early May using the same methods.

When grafting, seedling pieces or scions of the previous season's growth having 3 or 4 buds are used and the rootstock, or seedling is usually grafted so that the union will be 3 or 4 inches above the soil level. If

whip-grafting is being done the rootstock and scion are prepared by making a sloping surface on the rootstock and also on the lower end of the scion. The sloping surface should be about 1 to $1\frac{1}{4}$ inches long and should be the same in both stock and scion.

A tongue is then prepared in each by inserting the knife into the ends just above the center of the sloping surface and cutting toward the center and through it, working the knife downward against the grain to prevent splitting. This incision should be about 1 inch deep. The scion and rootstock are then fitted together by matching the cambium layers on one or both sides and then wrapping the graft with a narrow strip of rubber.

In the case of cleft grafting the end of the rootstock is split down about $1\frac{1}{2}$ inches with a grafting knife and the scion, in this case having been cut to a wedge-shape at the lower end, is inserted in the cleft, care being taken to match the cambium layers.

Where indoor grafting during the winter is done the scions are gathered in late fall and stored in cool moist sand until needed. After the grafts are made they are stored in a cool place in moist sand or fresh sawdust until planting time. No waxing of the graft is necessary. Where spring grafting is done the unions and the upper end of the scion must be thoroughly waxed with a good grafting wax.

The budding or bud grafting of seedlings is usually done between July 15 and September 1, depending on growing conditions during the season. The length of the budding period is determined by the earliest date at which the buds on the current season's growth are mature enough to use, and the latest date at which the bark on the seedlings will separate from the wood.

In budding, new buds from the current season's growth are used. In preparing the buds the whole length of the current season's growth is cut off and the leaves removed leaving a leaf stalk at each bud. These budsticks are then kept in a can of water until needed. A fresh supply of buds should be used each day if possible and use only the more mature buds on each budstick.

The next procedure is to trim off the lower twigs from the seedlings and to make a T shaped cut through the bark of the seedling about 3 inches above the ground level. The flaps of this cut are then raised with the knife and a shield shaped piece of tissue from the budstick, having a bud and leaf stalk attached, is inserted under the flaps. The flaps are then pressed down into position and wrapped with a rubber band leaving the leaf stalk and bud protruding. This rubber band is about 2 inches long and $\frac{1}{4}$ inch wide. Pieces from an old bicycle inner tube serve the purpose if rubber bands can-



This tree has had improved varieties grafted on.

not be purchased locally. The wrapping is done by beginning at the top of the cut and looping it around the stem once or twice above and below the bud and the end secured by pushing it under the last lap. No waxing is necessary.

In a very short time the bud will fuse into the seedling and the rubber band will fall off. The bud remains dormant until the following spring, at which time growth will begin. As soon as the bud begins to grow the upper part of the seedling, above the bud, should be cut off using a sloping cut so that the wound will heal over more rapidly. This wound is usually protected by waxing with a good grafting wax.

After one summer's growth, if growing conditions have been good, this bud will have produced a one year old whip 4 to 6 feet in height. The following spring this one-year-old whip may be transplanted to the orchard or left in the nursery to produce a two year old tree. In either case the whip should be cut back to about 40 inches above the ground, in order to obtain a good distribution of lateral branches during the coming season.

Dominion Offers Aid In Land Development

Increased development of farm lands from British Columbia to Nova Scotia may be undertaken with federal assistance as the result of a government announcement in the House of Commons, by the Right Hon. J. G. Gardiner, Dominion Minister of Agriculture.

The Dominion government is prepared to discuss with the provinces plans under which development could proceed over a period sufficiently long to bring about the desired results, but not to exceed five years.

Among the possible projects are reclamation of Nova Scotia and New Brunswick dykelands; flood control, land drainage and irrigation in British Columbia; the clearing and breaking of new land for farming all across Canada. In making this announcement, Mr. Gardiner said that the Government has decided not to extend the principles of the Prairie Farm Rehabilitation Act beyond the established drought and soil-drifting PFRA area in the three prairie provinces.

Life Insurance for Piglets

Guards placed along the sides of the pen about eight inches above the floor will prevent the deaths of many pigs caused by sows lying on them. Too much bedding while the pigs are small also causes many pigs to be crushed.

Selection of strong, vigorous sows, better feed, and avoiding overcrowding in pens and through doors and gates will help to decrease the number of pigs farrowed dead. Weak pigs are caused primarily by poor rations and insufficient exercise.

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Summer Moults and Flock Culling

by N. Nikolaiczuk

Summer moult occurs naturally at the end of the first laying year. It may come from June to October, and it represents a non-productive period. Early moulters are slow moulters, and therefore represent the least desirable birds in the flock. Research has so far failed to eliminate this normal inclination of the bird. But there are two counter-measures which are widely practised—annual replacement and judicious culling.

The popular and widely adopted technique on most well-managed poultry farms consists of replacing the entire flock with pullets each fall. The reasons are clear—a bird lays more eggs in her pullet year than she does as a yearling or a two-year-old. It is estimated that egg production drops 12 to 15 percent each year. The inefficient period during the moult can be eliminated by culling birds as they begin this annual change of feather coat. The late moulting birds are spared till the last, in order to obtain some eggs during the summer, before the pullets begin to lay. It is estimated that over 80 percent of our flocks are now annually replaced. The meat value of the birds, to a large measure, covers the cost of replacement.

In any plan where yearlings are carried into their

second year of production, judicious culling must be practised. Persistency in egg production, as shown by a late fall moult, is the basic guide. In addition, look for well-worn plumage, thoroughly bleached skin and shanks in yellow-skinned breeds, good body condition and evidence of vigour and vitality as denoted by red comb and wattles. These characteristics are a reasonable guarantee of satisfactory past egg production under practical conditions. Birds possessing these characteristics can be allowed to proceed with their moult at the natural pace till they resume egg production about December.

A "controlled" method has been devised whereby birds which are to be retained are selected a month earlier, say in August, placed on range in large barracks, not unlike an over-sized range shelter for growing birds, and forced into a moult. This is accomplished by restriction of feed to grain alone for a fortnight and thereafter grain-mash feeding or grass range is resumed. Because these birds are late moulters, the period of non-productivity is shorter. While the total number of eggs laid in the second year is smaller, egg size compensates for this reduction. This method is popular particularly with S.C. White Leghorn flock owners.

Forests Have Wheels Within Wheels

"Forests must be regarded as plant and animal communities and an attempt made to understand all the interrelationships of the organisms which live within such communities," G. R. Hopping, Division of Entomology, Science Service, Dominion Department of Agriculture, told the members of the National Parks Wardens Convention in a recent address on forest insect control.

On the one hand, he said, there is the plant association made up of the various tree species, shrubs, and smaller plants. On the other hand, there is the animal community consisting of insects and near relatives of insects, game animals, fur bearers, predators, and birds. All of these are closely inter-related and the disappearance of one factor may mean the dislocation and sometimes the disappearance of a whole series of organisms.

One may well ask what relationship exists between a bark-beetle, for instance, and fur bearers and game animals. Take Kootenay Park as an example. From 85 to 90 per cent of the lodgepole pine has been killed over large areas in this park by the mountain pine bark-beetle. This change in the character of the forest has perhaps

deprived much of the squirrel population of its natural food, and so the squirrels move out.

"This, in turn, deprives certain predators in the birds and fur bearers of their food, and they move out. The species of game animals which prefer denser types of forest also move out. Eventually, dead trees fall, making a great tangle of debris with consequent great fire hazard.

Perhaps a huge fire sweeps the park. In place of dense forest there is, at least for a time, bare hills. The fur bearers and the game animals are gone, and the character of the bird and insect populations has changed.

Then there is the change in the behaviour of the tourist. Where he used to tarry at the various camps, fishing and enjoying the scenery, he would travel as fast as his car would take him, intent on getting through that desolate strip as soon as possible to more pleasant surroundings.

In 100 years another forest may have covered the desolation, but man cannot wait for 100 years. That is why, when the bark-beetle threatened the Bow Valley in the Banff region, entomologists were in a hurry to do something about it.

Porches for Turkeys

by W. A. Maw

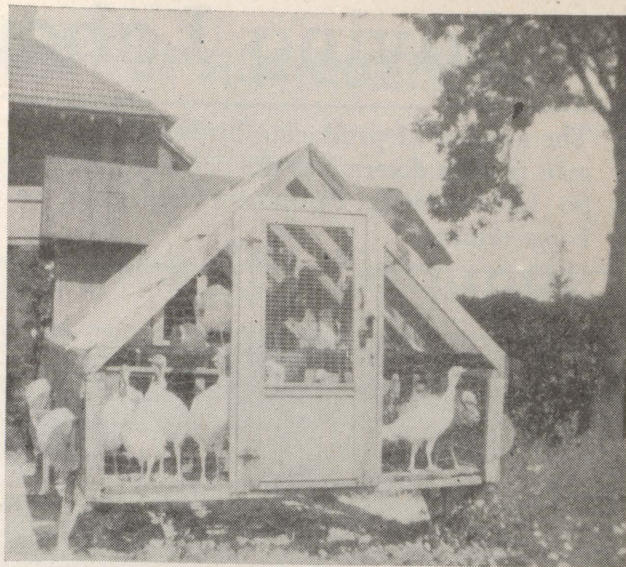
Porches have proved very satisfactory for growing turkeys in both small and large flocks. The idea of using the raised porch is to keep the birds off the soil and to have the porch floor high enough to allow for easy cleaning. The poults are brooded for the first four weeks as usual in a brooder, either on the floor with litter or on a wire screen floor. After four weeks the poults go out on the porches where both feed and water are available.

The porch floor may be either wire mesh or wooden slats, the latter being preferable to wire. Where wire is used a square mesh is best, using 1 inch by 4 inch of 12 gauge. The wood material is 1 inch by 1 inch hardwood, cut green, and put in place before dry. The slats are set one inch apart.

Roosts may or may not be used, as the birds will sit on the slatted floor without any injury to the breast. If wire is used, it is advisable to use roosts. High roosts are not as satisfactory as low roosts with the heavy breeds of turkey. Two by 2 inch scantling on 2 by 4 inch cross structure on edge makes a satisfactory roost arrangement. Wire flooring may be used under the roosting area.

Shade should be provided by covering a portion of the roof with boards, paper or bag material.

Feed and water are provided by use of hoppers and troughs hung, by use of large hooks, on the wire sides, with head room either through wooden slats or large mesh wire. The hopper illustrated is round-backed,



This porch is 10x12, with wire floor and raised roosts. Part of the roof is covered with bag cotton for shade. Note the feed hoppers on the sides.

with an inset lip on the front to prevent feed wastage. The shape of the hopper is such that, when hung to the side, the weight of the hopper keeps it close to the wall.

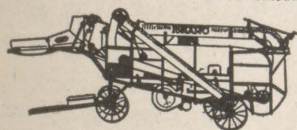
The floor area allowed for growing stock is five square feet per bird.

Fly control in the brooder house or porch can be cared for by the use of a water soluble D.D.T. preparation. Clean up the droppings periodically and spread lime or land plaster over the area to keep down fly production.

A simple porch arrangement for growing turkeys will prove to be a good investment in saving stock and labour.

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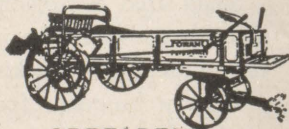
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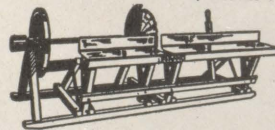
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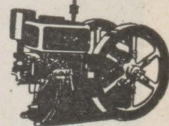
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Saving Labour with Poultry

The number of producing birds handled per man is what determines the profit in poultry. So labour-saving equipment is needed to boost returns.

by W. A. Maw

MANY poultrymen are today getting greater returns from their labour by doing work by mechanical means where possible. Watering stock, handling feed, cleaning batteries, grading eggs, cleaning eggs and plucking meat stock are all examples of work which has been mechanised to some extent, thus greatly reducing their cost. Convenience and efficiency are both emphasized in many operations thus handled.

Many operations in the daily routine work in poultry production and marketing may be greatly simplified by proper planning in house layout, and by the installation and adoption of labour-saving devices and practices. Perhaps the greatest development towards this end was in the adoption of the slot-type ventilation and the deep house, which allows for the use of deep litter practice and dropping pits. Proper ventilation is possible with this set of conditions: a house over 20 feet with the width slightly less, and front wall slot ventilation.

Proper ventilation, with sufficient temperature difference in the house as contrasted with outside, will result in dry litter, thus allowing for deep litter management. This practice alone is both economical in litter and labour, and adds greatly to the convenience in the winter management of the flock.

Perhaps the first thought of mechanical appliances



Laying a pipe-line on range. The installation of running water, along with self-feeders will eliminate a lot of work.

for labour saving should be with the handling of feed and water. Both jobs are laborious and costly. Overhead tracks or chutes can be simply installed to move feed with a minimum of time and effort. Water can be piped to all pens and into the work rooms for washing and automatic control of the flow in the drinking founts can be arranged.

Hand dollies and trucks can be used to great advantage in handling feed within a house. Where possible, gravity movement of feed is recommended through the use of slides or chutes.

In the handling of the products, such as eggs and poultry meat, mechanized equipment has been developed to a very high state of efficiency. In the cleaning of shell eggs, a buffing compound to be used on a cotton wheel has been developed. This dry cleaning method is superior to the wire wheel or the washing equipment being used. The buffer is operated by a small motor, $\frac{1}{3}$ or $\frac{1}{4}$ horse power. The cleaning compound is available in stick form and is applied to the cotton wheel, leaving a semi-soft surface for contact with the egg shell.

Eggs can be accurately graded for size on an automatic electrically-operated grader, immediately after candling the eggs for interior quality.

The processing of poultry meat stock is now highly mechanized. Electrocutation is used for stunning, and a buzz saw to cut the throat for bleeding. The plucking is done by a series of rubber fingers on a revolving drum. All sizes of stock, which have been semi-scalded at a temperature of 126 degrees Fahrenheit to 130 degrees Fahrenheit, depending on the age of the birds, can be plucked successfully. The birds are hung on shackles travelling on an overhead track. The stock thus handled travels continuously but slowly throughout the period of processing.

Small-sized equipment with limited capacity is available for producer use in processing equipment for both egg grading and plucking of poultry.

Battery brooders for growing stock and layers are equipped with mechanical scrapers for removing the droppings from the metal pans. In some cases, motor driven scrapers handle the work automatically when started.

Wherever possible the use of portable and mechanical equipment, which is labour-saving, should be introduced. With increasing costs of labour, supplies and equipment, the number of producing birds handled per man is what determines the profit. The use of up-to-date ideas in management is essential to successful returns.



DEPARTMENT OF AGRICULTURE

*Activities, Plans and Policies of the Quebec
Department of Agriculture*

Ormstown Fair Outgrows Its Grounds

The Ormstown exhibition is one of Canada's key fairs. It is the first big show of the season. And a day at Ormstown usually gives the fair-goer a pretty good idea of what he will see at other shows later on.

This is particularly true of the dairy show. Cattle-men come a long way to see what the line-up looks like. There's good reason for this, of course. This is the home of many of Canada's finest dairy herds. And calves being brought out for the first time naturally make their debut there. So this fair gives visitors a chance to see the latest additions to the show herds, and to figure out how hard it'll be to beat them at other shows. They usually decide it won't be easy.

Nor is it a one-man show in any breed. This year there were 16 Ayrshire exhibitors with a total of 135 entries. And the honours were split several ways. P. D. McArthur and Son, of Howick had the edge in championships, but R. R. Ness and Sons, Howick, and Mode-Bradley and Morrin-Bradley combinations of Lachute took their share.

There was a big Holstein show, too—105 head including some very high class competition. H. L. Guilbert of Vercheres took the lion's share of the championships, but W. A. S. Ayerst, Ormstown, and Dr. Wilfred Watson walked off with reserve ribbons for bulls.

The Jersey championships in a good show of 95 cattle were spread out among W. C. Winter, Huntingdon, Wm. McEwen, Ormstown, D. M. Rowat, Montreal, and Red Gable Farms, Huntingdon. That shows just how keen the competition was.

There were 40 Canadian cattle, all from the herds of L. A. Sylvestre, Clairvaux and Ernest Sylvestre, St. Hyacinthe, who divided the honors.

Ormstown is lucky in having a good arena where the dairy cattle and heavy horses are judged. It also has an unusual set-up, in that, apart from the sheds along both sides of the arena, and the horse stable behind it, there is just one other barn. It is in the form of a very heavy comb with every second tooth knocked out, and stalls both along the main stem and down each tooth. This barn provides space for all the cattle, sheep and swine.

But the show has come along so rapidly in the last few years that it has outgrown both the arena and the barns. When a class of 14 Ayrshire cows was being



Part of a class of 14 Ayrshire cows parading in the arena at Ormstown.

judged in one end of the arena, and Holsteins, Jerseys and horses were trying to get through to the other end, it was a bit of bedlam at times.

The association intends to remedy this within the next five years. It has its plans all drawn up to move the grandstand and race track 192 feet back from the arena, providing space for a new barn to house 300 horses.

Sheep and swine classes were both up considerably this year. No less than seven breeds of sheep turned up—Cheviot, Dorset, Hampshire, Leicester, Oxford, Shropshire and Southdown. Slack Bros., Waterloo, Que., and H. Skinner, Tyrone, Ont., split the Shropshire championships, while Slack and A. Ayre, Hampton, Ont., each had a top in Southdowns and Cheviots. G. H. Mark and Sons, Little Britain, Ont., won with Oxfords and Dorsets and Cecil Acres, Osgoode, Ont., took the Hampshire ribbons.

In Yorkshire swine L. A. Sylvestre, Clairvaux, had champion boar and Hooker Bros., Ormstown, the champion sow. Supreme honors in Tamworth boars went to Cecil Acres, Osgoode, Ont., and in sows to Gel. Hooker, Ormstown. G. H. Mark and Sons carried off both Berkshire championships. Geo. Hooker won in pen of three export bacon hogs, with Aime Gendron, St. Stanislaus de Kostka, second.

The growth of junior clubs in the Ormstown area was shown by the 76 entries in the judging competition. The top prize in this strong field went to Donald

McCaig of Ormstown, who was one of the Quebec representatives in the 1946 national finals at the Royal Winter Fair.

Ormstown gave strong evidence of a shift in interest from heavy to light horses. The heavy horse class did not overwork the judge. In fact, many of them had no more than one entry. This was particularly true in Percherons, where Julius A. Rosenfeld, Chateauguay, was the only exhibitor. In Belgians most of the honours went to Thorncroft Farm, Ste. Genevieve; but the grand champion stallion was a lone entry from Elzear Roy, St. Stanislaus de Kostka.

Clydesdale classes brought a few more out, but competition was still not keen. The grand championship for stallions went to Greig Bros., Ormstown. Donald A. McCormack of Brysonville carried off a good share of the ribbons.

But there were a lot of light horses out, and they

drew an enthusiastic response from the crowd. It was quite evident that away more farmers might be wise to consider raising a few good driving or saddle horses.

One other sign of the times was very evident. Fair visitors were keeping their pockets pretty well buttoned up. Attendance was down, in the first place—many farmers had not been able to get any seed into the ground, and the promise of a couple of days' fine weather kept them at home, in the hope that the land would dry out enough for them to get on it. However, the promise was not fulfilled. While the weather was fair enough most of the time, there were occasional bursts of rain that kept the land from drying out properly.

Even those who attended the fair were not in a spending mood. The rides ran idle much of the time, the sideshow barkers yelled themselves hoarse without very great results, and people were using the gaming booths simply as places to rest their feet.

Lachute Fair Strikes Fine Weather

Quebec's famous "spring" weather finally broke for the Lachute Fair, and clear skies and warm sunshine greeted the opening of this important early summer show. First day crowds were small, and attendance on the second day was still below average; probably a lot of farmers were taking advantage of the fine weather to get some badly needed work done in the fields. But business picked up and by Friday night the attendance figures for 1946 had already been surpassed.

Heavy rain starting on the afternoon of Saturday forced the cancellation of the programme for the remainder of the day, but did not interfere with any of the cattle judging, all of which had been completed by Friday night.

There was no falling off in the number of exhibits, however. Due perhaps to a 20% increase in prize money and additional trophies for competition in all classes, livestock entries, except in beef cattle (where only 5 head came out) were well above last year. Taxing the capacity of the barns were 197 Ayrshires, 133 Holsteins, 25 milking Shorthorns, 21 Canadians, 3 grade Ayrshires, and 2 herds of Jerseys, 231 sheep and 100 hogs completed the livestock entries, cages in the poultry building were well filled. There was also a fine showing of horses, and in all classes of stock quality was well above standard and the judges really had a job of work to do in selecting their top animals.

The provision of extra space in the Main Building for lunch rooms and a hospital has cut down the accommodation for industrial exhibits, but feed and fertilizer firms had some good displays, along with those of local stores and industries. Handwork and cook-

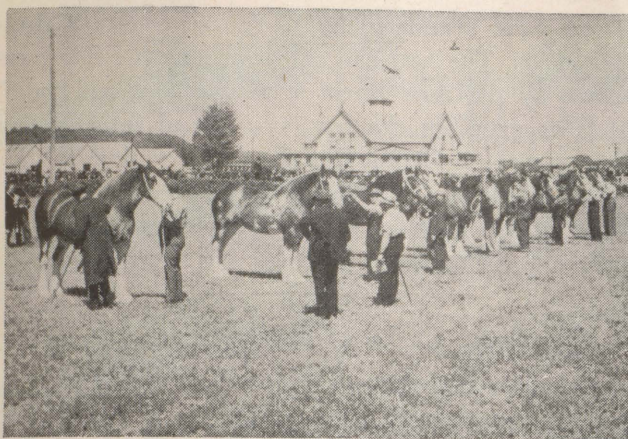


This class of Ayrshire heifers, with 29 entries, was the largest at the show.

ing displays by members of the county Women's Institutes filled the upper portion of the Building and the Lachute W.I. served excellent meals in their enlarged lunchrooms.

Members of the newly-organized Lachute Chamber of Commerce did fine service in giving assistance generally, and especially in finding rooms for out-of-town guests. And fair president J. H. Black, secretary-manager Alex. Bothwell and their hard working committees left nothing undone to make this Lachute's best fair to date.

Outdoor displays of farm implements and mechanical equipment of all kinds attracted large crowds, and a demonstration of fire-fighting, roadbuilding, post-hole digging and other attachments for the "jeep" proved of particular interest to the crowds.



A particularly fine class of yield mares

The horse show was a really outstanding one and fair officials had to provide for over 300 entries. The largest exhibitor was Gilbert Arnold of Grenville who, in spite of having lost 57 horses in a disastrous fire shortly before the fair opened, brought 93 head to the show, and took most of the awards in Percherons and Belgians, and all the awards in Canadians. Seven breeders appeared with Clydesdales, and the entries of G. Watson and Sons, Leonard, Ont., and of A. T. Cleland of LaTuque took the top awards.

Livestock Tops

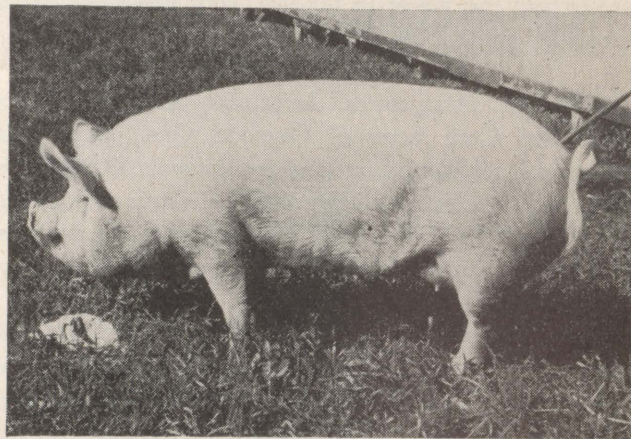
Heading 9 other entries in the aged bull class for Ayrshires, J. H. Black's Smithston Ivanhoe Imp. went on to the senior and grand championship, with reserve going to the junior champion, Sunny Dale Military Boy, owned by John McLennan, Martintown. Reserve senior was Le Moines Point Manifest and reserve junior was Linden R. Clark's Clarkdale Master.

In females, W. E. Rodger, Lachute, with Elm-brook Netty, had senior and grand champion. Cumming Bros, Lancaster, had reserve senior and grand champion on Glengarry Bridesmaid and reserve junior on Glen-

garry Lady Brigadier. J. P. Bradley and Son, Lachute, had Brookview Connie for junior champion. The group honours were split between Le Moines Point Farm, who took the ribbons for graded herd, senior get and progeny of dam, and J. P. Bradley and Sons who won in junior get and junior herd.

The Ayrshire classes were uniformly large and judge Allastair McArthur had a busy day placing them to his liking; it was well along toward dark before the judging was finished.

The battle in Holsteins was fought with Eladio Susieta, of Chile, as referee, and his placings, and the speed with which he worked, drew many favourable comments. He was particularly pleased with the quality of the animals he was given to place.



A good idea of the quality of the hog exhibits is this sow of Bruce Cummings', tops in its class.

Eglantieres Farm, Vercheres, owned by H. L. Guilbert, came out with some strong entries, and took the senior and grand championship from the Norda Farms, Vankleek Hill, with Montvic Emperor Ajax, and the reserve junior with Eglantieres Emperor Brass Hat. Junior champion and reserve grand was the leader in the bull calf class, Lauriston Ajax General R.R. for Mrs. A. G. Law, Hudson Heights, and the reserve junior champion, mentioned above, placed second in the same class. Wm. Meyer of Brookdale had reserve senior ribbon on Aristocrat Pabst Alcartra.

In females, Eglantieres Farm again came to the front and took the senior and grand championship with Blossom Queen Successor. Norda Farms had reserve senior and grand with Osage Orange Ormsby Posch. The junior champion was Hodgsondale Empress Valentine for Hodgsondale Farms, and the reserve went to Norda with Norda Colantha Darkie.

Eglantieres and Norda each won two of the group classes, Norda taking the ribbons for junior get and junior herd, Eglantieres for graded herd and progeny



Behind the scenes, the "cow laundries" did a rushing business between the barns.

of dam. Get of sire went to Alfred E. Garratt, Lancaster.

The Boys' Farm and Training School at Shawbridge showed the way in the Jersey breed, competing against only one other entrant, A. G. Hill, Hudson Heights. The Boys' Farm placed first in 9 classes and the two group classes, and had senior and grand champion male. Hill had junior and reserve grand champion, and the junior champion female, with the Boys' Farm taking the other female championships.

Only one herd of Canadians was brought to the show, by L. A. Sylvestre, St. Simon de Bagot.

Mrs. L. A. D. Duhamel, St. Eustache, had the only beef cattle exhibits, but the 25 milking shorthorns shown by Kilwin Farms and A. D. McGibbon and Sons, Lachute, were of particularly good quality. Kilwin farms had all the male championships, and the reserve senior and the junior in females, with the other championships going to McGibbon.

Big Sheep and Hog Show

Cheviots, Hampshires, Leicesters, Oxfords, Shropshires, and Cecil Acres of Osgoode, Ont., was out in front with his Hampshires and Southdowns. D. A. Cumming won all but one class with Leicesters and so did G. H. Mark and Sons, Little Britain, Ont. with Oxfords. Five out of six classes in Suffolks went to G. A. Hay, Marvelville, Ont.

The heat, and possibly the excitement of going to the fair, proved too much for one aged boar, a champion at Lindsay last year. On the first day of the fair the boar collapsed; the first and only fatality of the fair.

Yorkshires were the most numerous entries, and the

classes were dominated by L. A. Sylvestre and Bruce Cummings. The best pen of bacon hogs, however, was shown by the Boys' Farm at Shawbridge, and the T. McOuat prize for the best sow owned in Argenteuil County went to Carson Tomalty of Brownsburg.

In Berkshires, G. H. Mark and Sons took the lion's share of the ribbons, as did Cecil Acres, with Tamworths.

Quebec Delegates at Lethbridge

Messrs. George Maheux, Director of Information and Research, Auguste Scott, head of the Soils Division and P. E. Roy, in charge of the Agricultural Engineering Division, attended the meeting of the National Committee on Soil Conservation, held in Lethbridge June 23 to 27. J. R. Pelletier of the Experimental Farm at Ste. Anne de la Pocatiere was also at the meetings to present a report on soil erosion.

The chief item on the programme for the meetings was to discuss the present condition of farm lands in all the provinces of the Dominion, with a view to drawing up a plan of soil conservation which will be applicable to all districts. Mr. Roy discussed the drainage problem in Quebec, while Mr. Scott is interested in fertilization and land use.

Also included in the programme were trips to some experimental farms, and particularly the irrigated section between Swift Current and Lethbridge, which has been restored to cultivation through the Prairie Farm Rehabilitation Act.

Agricultural Research Council Formed

Agricultural research is an important part of the work of Departments of Agriculture, agricultural schools and colleges, and is often carried on to a certain extent by private firms or individuals. From all this work there emerge new techniques in farming, pest control, soil conservation and use, new varieties adapted to specific districts or needs, and a host of other important discoveries of vital interest to farmers. A lot of valuable experimental work is going on in this province constantly, but a number of workers may be working on the same problem in a number of different laboratories without any definite information as to what their fellow workers are accomplishing, with a resulting waste of time, effort and money. And once new information has been obtained, it is not always easy to spread the news among those people who, in the long run, are most interested, that is to say, the farmers themselves.

Realizing the need for a co-ordination of research in agricultural problems in this province, Minister of Agriculture Barre has created a Research Council whose

duty it will be to promote, co-ordinate and direct research projects most needed by Quebec agriculture. The committee will make a survey of actual requirements and will keep informed on new developments; will collaborate with all groups engaged or anxious to engage in agricultural research. The committee will bring together the available workers and will help in training other specialists as needs arise. And, perhaps as important as any other duty, the committee will see that the information obtained is passed on to the farmers.

Dr. George Maheux, an able scientist and administrator who is well known throughout Canada, will be chairman of the Council, and members of the council are J. A. Ste. Marie, Director of the Experimental Farm at Lennoxville, Dr. H. L. Berard, Director of the Provincial Dairy School at St. Hyacinthe, Dr. J. E. Chevrette, Professor of Field Husbandry at Ste. Anne de la Pocatiere, J. O. Vandal, Professor of Genetics at Laval University and Dr. Georges Gauthier, Chief of the Plant Protection Bureau, who will act as secretary.

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Aid in Repairing Dykes

The dykelands of the Bay of Fundy come under the jurisdiction of the Provinces of Nova Scotia and New Brunswick. Recent Dominion activities in dykeland rehabilitation have been undertaken mainly for the purpose of assisting the provinces and dykeland owners to effect emergency repairs rendered necessary by exceptionally severe damage by storms to

the the dykes and aboiteaux. Direct Dominion action has been limited to experimental work on dykeland rehabilitation conducted by the Dominion Experimental Farm at Nappan, N.S., and to the loan of the services of officers of the Dominion Experimental Farms Service in provincial repair programs, states the **Agricultural Institute Review**.

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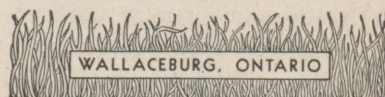
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CO-OPERATION AND MARKETING

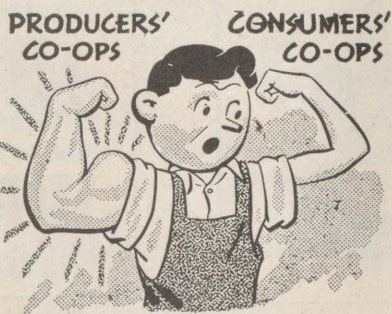
A page of interest to members of farmer's co-operatives

Would Organize Consumer Co-ops

"The Canadian co-operative movement is not well-balanced," says A. B. MacDonald, general secretary of the Co-operative Union of Canada.

"All recognize the need for a greater expansion of consumer co-operatives in our urban centres," Mr.

MacDonald said. "To do this, time and effort must be spent in awakening the interests of and developing right relations with organized labor, professional and church groups. The agencies are available in urban Canada for launching a vigorous campaign, but it will require considerable effort to organize the forces required for such a development.



"The tremendous growth of the consumer co-operative movement in Britain and the Scandinavian countries gives the lie to the pessimism of those who scorn attempts to mobilize the consumer demands of our city-dwelling people. It is certain that the co-operative movement in Canada will never be able to enter seriously into the manufacturing of consumer goods until the city and town consumers are organized on a strong basis to supply themselves with co-operatively produced commodities."

Mr. MacDonald said that consumer co-operative development is not only in the interests of city dwellers but is "extremely necessary in order to achieve further economies in the purchase of commodities and in the building of friendly markets for primary producers." The recent development which finds networks of consumer stores springing up in such thickly populated centres as Chicago, New York and Detroit, provides a strong incentive for us to mobilize our efforts in this direction.

Ontario Farmers Visit Quebec Co-ops

Thirty Ontario farmers spent a week in June on a tour of co-operatives in Quebec. The tour, organized by Leonard Harman of the United Farmers Co-operative Company, covered a wide area beginning with a day in Montreal and going on to Granby, Asbestos, Victoriaville, Princeville, Plessisville, Quebec City and Levis, and returning by way of Ancienne Lorette, Louiseville and Joliette. In this itinerary the Ontario party saw co-operatives handling a wide variety of products—from grain, butter, cheese, powdered milk, eggs, poultry and meats—to maple sugar, flax, tobacco and wooden boxes. They also visited the headquarters of the Caisse Populaire at Levis.

The visiting farmers were entertained by the Co-operative Federee at dinner in Montreal and for luncheon in Quebec East at the plant of the Federee Abattoir there.

Prominent in the party were D. E. Stauffer of Bright, Ont., Vice-president of the United Farmers Co-operative Co., A. H. K. Musgrove, Educational Director of the Ontario Co-operative Union, and C. H. Hodge, editor of the Farmer's Magazine. Co-operatives in ten different Ontario counties were represented on the tour.

The tour reached Macdonald College for the meeting of Quebec Farm Forums.



The bus which carried the Ontario Co-op Tour is parked here in front of the Co-operative Federee Abattoir at Quebec East, while the members visit the plant.

Manitoba to Establish Co-operative Division

Premier Stuart Garson has advised the Manitoba Federation of Agriculture and Co-operation that the Provincial Government is proceeding to set up a Co-operative Division within the Department of Agriculture and Immigration.

"Our plan," said Mr. Garson, "is that in next year's estimates we shall group the three items, Registrar of Co-operative Associations, Credit Union Supervision, Study Groups and Library Material under the general heading of Co-operative Services."

Prague, Site for World Co-op Congress

Prague, capital of Czechoslovakia, has been selected as the locale for the 17th International Co-operative Congress, scheduled to take place "not later than the first half of September, 1948", reports the headquarters of the International Co-operative Alliance.

It was recalled that at the Paris Congress, 1937, plans were made to hold the 16th Congress at Prague in 1940, but the war intervened, and Congress was postponed until 1946 when the ICA Executive again chose Prague. The decision was subsequently changed in favour of Zurich, Switzerland, where the 16th Congress took place in October, 1946. The Co-operative Union of Canada, which has had membership in the Alliance since 1921, was represented for the first time at a world congress when its general Secretary, A. B. MacDonald, was present at the Zurich Congress.

Index of Farm Prices

Index of wholesale prices for farm products was quoted by the Dominion Bureau of Statistics in a recent return, to have been 116.9 in April of this year, based on 1926 at 100. This compares with an index of 110.7 in April of last year, an increase of 5.6%.

In the same period, the total cost of living index in Canada increased from 120.8 to 130.6 for April of this year, an increase of eight percent.

Most Income Tax Payers in Low Brackets

About 70% of those reported to have paid income tax in 1946 were in the income brackets of \$2,000 and under, according to a return filed recently in the House of Commons. Another 24% were in the brackets from \$2000 to \$5000, so that a total of 94% of all income tax payers reported incomes of \$5000 or less.

Total number of taxpayers reported for 1946 (a preliminary estimate) was 2,531,800, of which 1,757,000 had incomes of \$2000 and under, and of which 711,000 had incomes between \$2000 and \$5000. A total of 18,000 reported incomes of more than \$10,000 annually.

St. Hyacinthe Holstein Club Holds First Sale

On the seventh of last month the local Holstein Club at St. Hyacinthe held its first sale of young registered Holstein cattle and a large number of farmers, in the market for good breeding stock, attended the sale which was held at the exhibition grounds.

Forty-eight heifers and six young bulls were offered, and sold at an average price of \$154 for females and

\$160 for males. Encouraged by their success, the promoters of the sale plan to make this a yearly event.

Market Comments

Butter rationing has been discontinued. The supply on hand is greater than that of the previous year. The slight decrease in sales of fluid milk leaves more milk to be manufactured into butter hence the supply situation has improved sufficiently to warrant giving up rationing. In dairy products price appears to have some influence on both demand and supply no matter what regulations are made or what authority does the regulating.

The late wet season promises more grass and hay than grain. A conference at Ottawa June eleventh decided to move as great a quantity of Western feed grains as possible East before lake navigation closed. Attention to this matter at this season of the year should do much to meet the expected situation.

Livestock prices continued to advance with the exception of veal and lamb.

The potato market continued strong after the recent rise. The export of potatoes overseas prevented the surplus over domestic needs from depressing prices. Reports of slightly decreased planting of this crop are frequent.

The Montreal market is largely dependent on import for other vegetables and apples from the United States are reported on that market. The British Columbia apple crop is estimated at from 70-80 per cent of crop of last year.

TREND OF PRICES

	June 1946	May 1947	June 1947
LIVE STOCK			
Steers, good, per cwt.....	\$ 13.75	\$ 14.92	\$ 15.18
Cows, good, per cwt.....	10.55	11.65	11.90
Cows, common, per cwt. ...	7.65	9.30	9.65
Canners and cutters, per cwt.	6.50	8.08	8.30
Veal, good and choice, per cwt.	15.60	14.85	15.05
Veal, common, per cwt....	13.00	13.03	12.35
Lambs, good, per cwt.....	15.10	12.35	10.98
Lambs, common, per cwt...	11.50	9.67	8.50
Bacon hogs B1, dressed, per cwt.	21.60	21.85	21.88
ANIMAL PRODUCTS			
Butter, per lb.	0.38	0.49	0.50
Cheese, per lb.	0.22	0.25	0.26
Eggs, Grade A, large, per doz.	0.37	0.38	0.38
Chickens, live, 5 lb. plus, per lb.	0.30 1/2	—	0.30
Chickens, dressed, milk fed A, per lb.	0.37 7/8	—	0.38 1/2
FRUITS AND VEGETABLES			
Apples, B.C. Winesaps, per Box	—	4.00-4.10	4.00-4.10
Potatoes, Quebec No. 1, per 75 lb. bag.....	2.15	1.60-1.75	1.75-1.85
FEED			
Bran, per ton	29.00	29.00	29.00
Oli Meal (38%)	—	45.25	45.25



Strippings

by Gordon W. Geddes

All bad-weather records have now been broken including 'It Ain't Gonna Rain No More' for it certainly is. The downpour of two years ago was just a gentle drizzle compared to this year. That time we had a very dry spell in April before the rain began and it cleared up in time so that I finished seeding June 6. This year it was June 13 when we sowed the last of the grain we hoped to thresh including three-quarters of an acre sowed the second time. The worst of it is that we are not sure it will grow. Most of what we sowed early did but this land was pretty wet when seeded and needed dry days to give it a chance. However, I suppose it has a chance while the many acres still unseeded haven't even a chance. We thought our land was wet until we were down near Sherbrooke and saw the fields under water like a lake. We had to plow a spot in the pasture to get a place for the potatoes and even that was rather soggy in spots. We still have a very wet place in the pasture which we hoped to do something with. The bulldozer never ditched it but Lorne and I have tried to help it a little. There is certainly water in the

ditches but there is all over the rest of the field as well.

About the only hope in the picture seems to be grass silage. The man who couldn't get his plowing done last fall may be the lucky one as he probably didn't get much done this spring either so will at least have lots of grass. At that there may be quite a crop of grass on some of the plowed fields as well but it will be rather rough for harvesting it. Certainly, unless there is a change of weather, we won't be able to make hay by ordinary methods. Just in this section getting a suitable outfit to put grass into the silo is a problem. As I wrote last month I supposed I had risked the investment in a new rig but it now looks as if the machine had been shipped in another direction. The smaller outfits that could make fair headway putting away corn are too expensive for grass if one must hire them. At present I do not know of one large enough that can be hired. However, I felt that way last year until two days before we started filling the silo. Our neighbour would like to fill his silo right up this year after the trial of last year so there will be someone else interested in the matter.

The weather made us miss the cod-



ling moth spray in the orchard but we still hope to get in the ones for the railroad worm which is even more troublesome. Blossoming was light in the orchard this year, especially on the peach apples and the neighbours report the same condition so there won't be any apples to spare for the worms. And there won't be any potatoes to spare for the bugs either so don't forget to use the 50% wettable D.D.T. to keep them off. To make a real good job of it, put the D.D.T. in a Bordeaux mixture and keep the blight away as well. There are many reports of potato seed rotting in the ground in the cold wet weather. Our local potato king has 900 bags of potatoes yet to plant so it looks as if spuds might be worth a

good price only no one will have any to sell.

If there is a silver lining to every cloud, the only one I can see in the present rain clouds is that consumers are liable to properly appreciate the value of farm produce this winter and won't be howling so much about the price. But that will be rather cold comfort to the farmer who has nothing to sell. Some are now trying to console themselves with the thought that there are lots of others in the same boat but, in reality, the larger the territory affected the worse the situation is since world supplies are so much further reduced. When our present little pigs go to market, we won't know whether it is safe to get any more or not.

Even the old cow which we had in the doubtful class has now made her R.O.P. requirement so it seems fairly sure of a 100% pass the first year unless something serious happens to the last heifer. We hesitated quite a while before we re-entered this year because of the feed situation but there were a number of set-backs last year and they still got through so we decided to try again as it is a program which needs following up to get results. Coupled with the artificial breeding, it should give us a chance to do our share towards keeping butter unrationed.

FREE PLANS FOR FARM BUILDINGS

Five thousand blue prints and about 30,000 printed sheets of building plans and details were mailed direct to 4,000 applicants by the Architect's Office, Central Experimental Farm, Ottawa, during the financial year ended March 31, 1946.

The plans and information sheets are designed particularly for small farms and are available for general distribution.

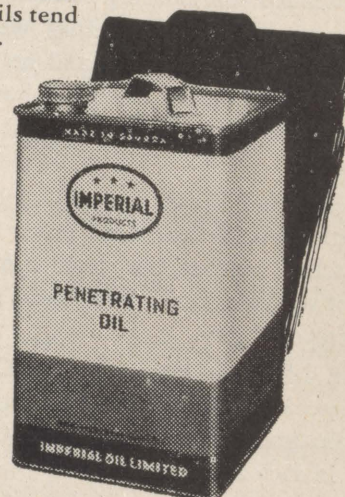
BUILDING UP WOODLOTS

Foresters say that the reason for the poor quality of timber on many woodland properties can be traced directly to the continuous removal of the best quality trees. They point out that the removal of the least desirable trees for fuel and pulp will leave the best to grow more rapidly toward profitable size.

3 WAYS TO A SMOOTH RUNNING FARM



Your separator, running at extremely high speed, needs a special oil to maintain steady lubrication and prevent wear and the resulting bowl vibration. Imperial Cream Separator Oil is scientifically made to protect the close-fitting bearings of your separator in summer heat and especially in winter cold when ordinary oils tend to congeal.



Imperial Penetrating Oil is especially useful in overhaul jobs for loosening rusty nuts and bolts. It is also valuable for curing squeaks and stiffness in automobile, wagon and carriage springs. It works its way between tightly fitting metal surfaces, dissolves gummy substances and gives real lubrication.



Powdered mica is one of the ingredients in this high quality axle grease that provides smooth operation for wagons, spreaders, hayloaders, etc. A thin film is effective and long lasting—lubricating even when the spindle appears dry. When you buy axle grease be sure it's "Mica."

These and numerous other Imperial products needed on the farm are available from your Imperial Oil dealer or agent.



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Farm Division



THE WOMEN'S INSTITUTES SECTION

*Devoted to the activities of the Quebec Institutes
and to matters of interest to them*

Q.W.I. Board Meets at Macdonald College

Mrs. C. E. Conley, Sherbrooke, elected president

Youth Hostelling, assistance with school lunch programmes, radio publicity, and a further extension of the work in education by means of short courses were some of the topics discussed at the annual meeting of the Provincial Board held at Macdonald College, June 23-24.

Mr. Hoage, of the Canadian Youth Hostel Association attended the morning session, Tuesday, and spoke briefly on their work. Thanks were extended to the Q.W.I. for their assistance and he asked for continued support by members acting as house mothers, checking on hostels now in operation and aiding in opening new trails.

Mrs. Ruth B. Shaw of the Junior Red Cross gave information on the assistance given by that organization with school lunches, but stated it must be a community project with the local school board and parents assuming part responsibility.

Mrs. Margaret Howes of the C.B.C., told of plans for a weekly broadcast this fall with series from various organizations and suggested the Q.W.I. might find a place in such a programme.

The question of short courses brought much discussion. Full co-operation has been generously offered by Macdonald College and a committee was formed to explore the possibilities of instituting such courses, when facilities were available, and means of financing them. This consists of the President, Mrs. Conley, the Treasurer, Mrs. Harvey and Mrs. Coates, Convenor of Education.

Save The Children Fund and the Personal Parcel Scheme are to be continued as provincial projects and all branches were asked to give their usual whole-hearted support to these activities.

The bursary in the B.Sc. (H.Ec.) course was awarded to Miss Mildred Lyster, Trenholm, and in the Diploma Course in Agriculture to R. H. Kirby, Cookshire.

The usual courtesy resolutions were passed with others showing the far-reaching interests of the Q.W.I. Every branch take out membership in the United Nations Society of Canada, certificate of immunization for diphtheria required for school entrance, petition for contributing national health insurance, recommend the brief on



The Board of the Quebec Women's Institutes, photographed at Macdonald College while the annual meeting was being held.

the Civil Status of Married Women in Quebec be given consideration and support for leadership training courses in community work.

The nominating committee presented the following slate of officers:

Past president: Mrs. Chas. Smallman, Dundee, Que.

Honorary vice-presidents: Mrs. M. E. McCurdy, Lennoxville, and Miss Abbie Pritchard, Wyman, Que.

President: Mrs. C. E. Conley, 29 Second Ave., Sherbrooke, Que.

First vice-president: Mrs. Roswell Thomson, Abbotsford, Que.

Second vice-president: Mrs. A. E. Abercrombie, Lennoxville, Que.

Secretary: Miss Evelyn Walker, Macdonald College.

Convenors

Agriculture: Mrs. J. D. Lang, Brysonville, Que.

Education: Mrs. Arthur Coates, East Angus, Que.

Home Economics: Mrs. Volney Hurley, Sawyer-ville, Que.

Welfare and Health: Mrs. H. Ellard, Wright, Que.

National and International Relations: Mrs. H. H. Mortimer, Port Daniel Centre, Que.

Publicity: Mrs. H. G. Taylor, Ayer's Cliff, Que.

Representatives, F.W.I.C.: Mrs. C. E. Conley, Sherbrooke, and Mrs. A. E. Abercrombie, Lennoxville,

Highlights of F.W.I.C. Conference at Halifax

From Report presented by Mrs. A. E. Abercrombie at Q.W.I. Board Meeting.

Results of the Lady Tweedsmuir competitions were announced and a sterling silver cup awarded each winner. The best village history was submitted by Hampton Women's Institute, New Brunswick; the essay "Book I Most Enjoyed" by Islay-Zion, Ontario; shopping bag by Bible Hill, Nova Scotia. These cups are to be competed for in each biennial term and a new list of competitions is being prepared to be forwarded to Lady Tweedsmuir for approval before the information is sent to the branches.

Mrs. Cameron E. Dow has been appointed as F.W.I.C. representative at the A.C.W.W. Triennial Conference in Amsterdam September 8-13. Seventeen members of the Women's Institute across Canada have also signified their intention of attending this conference.

There was a report of the present condition of the Peace Garden on the international boundary between Manitoba and the United States. Work is to be resumed on this garden and the F.W.I.C. named Mrs. Robert Palmer of Waskada, Manitoba, and Miss Frances I. McKay, Superintendent of Manitoba Women's Institutes as a committee to report on work done and if necessary call on provincial units for funds.

The F.W.I.C. policy for the coming biennial term is as follows: (a) Education for Citizenship. (b) Home improvement and rural development with accent on Youth. Much time was devoted at the conference to discussion of junior work and this theme is being taken up very actively by the provinces.

Following is the slate of officers:



F.W.I.C. Board. The executive are shown in centre front. Reading from left, third, Mrs. Morton, fourth, Mrs. MacMillan, fifth, Mrs. Dow, sixth, Mrs. Crowe.

Past president: Mrs. C. E. Dow, Port Daniel West, Que.

President: Mrs. A. C. MacMillan, RR 4, Charlottetown, P.E.I.

First vice-president: Mrs. E. E. Morton, Vegreville, Alta.

Second vice-president: Mrs. E. M. Crowe, Stewiacke, N.S.

Secretary-treasurer: Mrs. W. B. Leatherdale, Coldwater, Ont.

Home Economics: Mrs. T. L. Townsend, Fort Garry, Man.

Citizenship: Mrs. A. S. Dennis, 3569 West 12th Ave., Vancouver, B.C.

Publicity Director: Mrs. A. E. Abercrombie, Lennoxville, Que.

Vegetables and Your Family

by Marjorie E. Hurley

Vegetables play an important part in keeping your family well fed. For all of us in this country to have a satisfactory diet, there should be consumed, besides other foods, twice the amount of vegetables we eat now. This, then, is your problem — planning meals with plenty of vegetables. But some of you may find that getting your family to eat vegetables is another problem so —

Make vegetables good to eat. Eating should be fun, meals should contain a vitamin you cannot find in a laboratory—the vitamin of gastronomic gusto. We will all eat for health's sake, if we enjoy the foods that are good for us. So if you do find vegetables a problem, check up on your method of cooking and serving them, for you can make them so inviting and good to eat that your family will ask for second helpings. For new flavours, try cooking two or more vegetables together.

Use mixtures, too, in stews and in casserole dishes with eggs, cheese, meat or fish. Now and then serve vegetables in a smooth, well seasoned sauce, made with milk and any water remaining after cooking a vegetable or after heating a canned one. Often, vegetables are cooked too long and in too much water, which makes them drab affairs, pale, limp, and flat in flavour, with much of their food value lost in the cooking water. Use only a little water, about an inch of boiling salted water in the bottom of the pan will keep steam rising through the vegetables. The dish should have a cover that fits snugly to keep in the steam. Cook vegetables just until they are tender-crisp. Keep at hand a timetable for cooking them and test promptly with a fork to avoid overcooking. Add a generous lump of butter or a little cream when they are done. Taste before serving and add that extra dash of salt or pepper to bring them to perfec-

tion. A little sugar added to vegetables in cooking will greatly improve their flavour. If you are preparing an oven meal, try baking the vegetables in a covered casserole, with about an inch of water. The new pressure saucepans cut down the cooking time, need little water; the smaller amount of oxygen in the cooker helps to protect the vitamins.

Canned and quick frozen vegetables. Today's commercial canning process is one of the best methods of conserving the vegetables' original vitamin content. To heat canned vegetables (except tomato and corn) for serving, drain the liquid into a saucepan, boil it down half, add vegetable, heat, season and serve. Quick-frozen vegetables in packages are now available the year round. They retain the colour, flavour and tenderness the vegetables had when picked. Do not defrost first, they are ready to pop into the pot. Follow the directions on the package.

Fresh vegetables. Serve raw vegetables at least once a day, in salads or as appetizers, and so conserve their vitamins and minerals.

Know Your Vitamins

Vitamin A—

Promotes growth. Helps to prevent night blindness and eye diseases.

Found in liver, cod liver oil, yellow vegetables, milk products, greens, peaches, etc.

Vitamin B₁—

Needed for normal growth. Stimulates appetite. Aids digestion.

Whole grain cereals, nuts, peas, beans, liver, lean pork, asparagus, corn, milk.

Vitamin C

Growth and Health. Development of good teeth. Corrects or prevents scurvy.

Citrus fruits, tomatoes, lettuce, strawberries, apples, cherries, cantaloupes, raw cabbage, spinach, peas.

Vitamin D—

Essential to normal bone and tooth development. Aids in the cure of rickets.

Cod liver oil, egg yolk, oysters. Direct sunshine.

Vitamin G—

Improves growth. Essential in nerve tissue.

Green vegetables, potatoes, tomatoes, apricots, carrots, yellow corn, liver, eggs.

Niacin (Member of vitamin B group)

Prevents pellagra and certain other deficiency diseases.

Lean beef, liver, salmon, milk, yeast, wheat germ, kale, green peas, tomatoes, potatoes.

A well-balanced diet will contain all three of the essential classes of food, Proteins, Fats and Carbohydrates, plus Vitamins and Minerals.

The Month with the W.I.

Institute members certainly never "weary in well doing". The Personal Parcel Scheme is continuing with unflagging zeal and "personal" is a most apt term, as all are taking a very real interest in trying to fill the needs and wishes of the recipients. The friendly and grateful letters being received in reply bring their own reward and many happy contacts are being made. As Abercorn remarks, "It is nice to know they are appreciated." Several branches are sending two parcels every month to different addresses, Morin Heights and Way's Mills reporting thus this time. Rawdon mentions they send 20 lbs. every month now that the weight has been increased. This is shared by five people.

Many reports of county meetings have also been received, all so packed with good things I could wish there was room for more than a line. I hope these have all been reported fully in your local press. Representatives of the Q.W.I. executive have attended these, an arrangement which has now been made permanent.

Argenteuil: This county entertained representatives of the local Cercles des Fermières at their meeting. The two organizations are exchanging visits. Arundel had an original programme which took the form of a radio play reviewing the history of the early settlers. The

county pres. Mrs. R. McFaul, was a guest at this meeting. A member of this branch, Mrs. Alfred Staniforth, had the honour of winning first prize in this province for a bag entered in the Lady Tweedsmuir Competitions. This was made from a jute potato sack and worked with coloured wools. Brownsburg had a talk on "Plastics" in the kitchen" by Mr. J. Rowan, a graduate of Los Angeles Plastic Institute. A W.I. pin was presented to



The above picture gives some idea of the crowd gathered at Guelph for the celebration of the fiftieth anniversary of the Women's Institute. Over 12,000 attended to view the historical pageant "Let There Be Light" presented by the Ontario Women's Institute, which portrayed in vivid fashion the birth of the Institute, its growth and triumphant conclusion with the thought "We Treasure the Past and Face the Future".

Aid Hospital



Four counties in the Eastern Townships have each undertaken to raise the amount of money required to furnish a semi-private room in the new hospital soon to be built in Sherbrooke. Richmond County is the first of these to reach this objective. The above picture, taken at their annual county meeting, shows the county treasurer, Mrs. John Hawker, presenting a cheque for \$563 to Mr. Sangster, chairman of the New Sherbrooke Hospital Building Campaign. Included in the picture are Mrs. Ira Patrick, County President (centre) and Mrs. R. Kerr, Sec.

a member moving from the community and another member, leaving for England to become a bride, was remembered with a silver rose bowl. Frontier held a merry "taffy" party to augment funds. Lachute enjoyed a talk on Canada and the U.N.E.S.C.O. A demonstration was given on applique, diamond socks and smocking and members were reminded to have their exhibits ready for the fair. Morin Heights heard a talk by the convenor of Agriculture on the care of house plants and bulbs. Military whists are proving most successful. Lakefield discussed the Blue Cross. Pioneer enrolled another member and donated \$5 each to the Red Cross and fair work. Mr. Peters of the Lachute High School gave an address on vegetable gardens. Upper Lachute and East End reports two new members. The guest speaker, Mrs. F. Black, gave a talk on her trip to California. \$3 was donated to the Children's Memorial Hospital.

Brome: Abercorn; here is an unusual comment from this report, "We met with a member who lives in Vermont, U.S.A. (Have we many such "international" branches I wonder). A food sale was held and a paper given by the convenor of Welfare and Health. South Bolton has ordered some of the English gift books. Not only are they sending a basket to a sick neighbour but a bee was held to sew for her children. Articles were donated for a sale.

Bonaventure: Another county meeting held with this branch as hostess. Sunshine bags are being used as a method of raising money for general funds.

Compton: Brookbury reports many donations; \$10 more to Bury for the cocoa fund (making a total of \$15) \$5 as a gift to a Hong Kong veteran recently married,

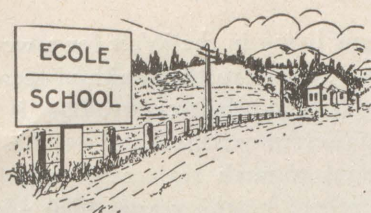
\$3 to a local girl now living in the West for a wedding present and \$10 as a reward to their faithful secretary. Quilts are being made to aid the treasury. Bury is sponsoring a canteen at the Army dances and \$41 has been received in donations towards the cocoa fund. This branch is holding a school fair this year and have opened a thrift shop. Good luck to you in these ventures. A demonstration on ironing a man's shirt and an exhibit of articles made from twine were features of their meeting. East Clifton held a social evening with Rev. and Mrs. Chas. Cushing as guest speakers. A description of a trip to Europe, which they had taken, was given illustrated by pictures and souvenirs. Scotstown: geraniums, which had been given the members last fall, were brought to this meeting and judged, prizes being given the winners. A contest on flower plots is slated for this year. A food and donation sale is being planned to aid the cemetery fund. Sawyerville is holding a series of successful card parties.

Chat.-Huntingdon: Aubrey-Riverfield made their annual donation of \$25 to the Cancer Fund. Several entries are reported from their High School in the County Public Speaking contest. Current events in all departments were given and a true or false contest. Dundee announces with regret the loss of a charter and life member in the passing of Mrs. C. R. Grant. An exhibit of tatting, a demonstration on paper dish cloths and tea aprons and a talk by Mr. C. Petch on "History of Agriculture" formed a varied programme. Franklin Centre held a sale of work at Ormstown fair and are raising funds for the Barrie Memorial Hospital Campaign. Hemmingford also assisted the same hospital by donating \$25 towards the campaign. A talk on home canning and readings from an article by Dr. Charlotte Whitton, "The Exploited Sex" are mentioned concluding with the comment, "Our branch is growing rapidly, we have 45 members now." Huntingdon, another donation to the hospital campaign is noted here. Mrs. Smallman was an honoured guest and gave a talk on "Youth and Education". A demonstration on a daisy pattern cushion and bedspread concluded the programme. Howick, a talk on gardening and a paper on Home Economics were features of this report. Ormstown is making use of the English gift books. A salad making demonstration was followed by short talks by the convenors and an impromptu programme was carried out, each member contributing an item.

Correction on Missisquoi County Article

Since compiling this article Fordyce Women's Institute has been organized.

*Due to lack of space, a further section of
"THE MONTH WITH THE W.I."
had to be held for next issue.*



LIVING AND LEARNING



Farmers Flock to Campus

Annual meeting of Farm Forums, and Macdonald College Farm Day
attract five hundred people.

"As I see it", said President Stuart Armstrong at the Annual meeting of the Quebec Council of Farm Forums, "we will have to support the C.F.A. in organizing a world market, and we will have to plan our farming on a world-wide basis and have orderly production and thus avoid dumping our surplus at a price below cost of production. During the war we had a taste of the stabilized market for the first time, and now as I see it, that kind of marketing is the solution for the future. We must know what the cost of production is, and we must be able to base our selling price on that cost with a reasonable profit that will let us have a little left over to help us enjoy life."

As a keynote to an orderly, well attended annual meeting, Mr. Armstrong's statement was a measure of growing maturity of this new farm organization, which was organized in 1941.

The feed grain shortage was tackled, with a strong resolution supporting the efforts of the C.F.A. to secure decisive governmental action before it is too late.

There were other resolutions — supporting the splendid service of the Canadian Broadcasting Corporation to farm people, commending the services of Macdonald College to farm people, calling for a floor price for butter at not less than 52 cents.

R. Alex Sim, in presenting his report as Secretary-Treasurer, noted the rapid growth of Farm Forums, and

the expanding services of the Council. The Council's income thus far, he pointed out, had not kept pace with its expenditures. J. D. Lang, as Chairman of the finance committee moved a resolution authorizing county committees to raise next year the needed sum to keep the Council's books balanced, which will be close to \$800.00.

Jos. Galway referred the delegates to the annual report of the Council where his work was recorded. He then introduced Floyd Griesbach, his successor. Later Mrs. Helen McElrea presented Mr. and Mrs. Galway with a memento of their two years useful work with the organization.

Alex Sim introduced the special guests who were in attendance; Colin Groff, Secretary, Canadian Federation of Agriculture, Mlle. Renee Morin, Secretary, Quebec Association of Adult Education, J. E. Dube, Director of Services, Quebec Department of Agriculture, Romeo Martin, Secretary, Cooperative Federee de Quebec, Fergus Mutrie, Supervisor of Farm Broadcasts, C.B.C., Leonard Harman, and Dan Stauffer, Vice-President of the United Farmers Cooperative Company, Toronto, the last two members of the party of 30 cooperative officials who completed their weeks tour of Quebec Co-ops at the Farm Day.

It was the impression of the delegates that the annual meeting and the College Farm Day had become events of unusual importance to the Quebec farmer.



Some of the visitors went out to the fields . . .

. . . while others preferred to visit the poultry range

As these three pretty receptionists will testify, business at the registration desk was brisk.



The Exhibit and Display room drew large crowds on Farm Day.

Council Adopts New Constitution

by R. Alex Sim

In 1941, when the Quebec Council of Farm Forums was organized, it adopted a Constitution which was very well suited to the needs of a young organization. The Council has operated, with a couple of minor changes, under the 1941 Constitution, though its unsuitability was becoming more and more obvious.

During the past year the Council has been studying the Constitution, and after a series of drafts were prepared, the final one was circulated to the groups after the Council meeting of February 20th. Again, at the meeting of June 20th, the Constitution was discussed before being presented to the Annual Meeting.

There are several significant changes, changes that permit its members a fuller, more democratic participation.

The new Constitution provides for the organization of county committees, instructing each Forum to elect by ballot one representative to the county committee. Then at the Spring Rally of the county, the county representative is elected. These elected representatives constitute the new Council, and they elect their officers, and such additional members as they feel are needed to carry on the business of the organization efficiently: this year were so elected one woman, Mrs. Helen McElrea; one agronome, W. G. MacDougall; and three past presidents, P.D. MacArthur, Alan Crutchfield, and Stuart Armstrong. The officers were representative of the main regions of the province where Farm Forums operate.

Stuart Armstrong retired, at his own request, from the presidency after one year of office, on the ground that the members of the executive should rotate fairly rapidly. At the elections Mr. Armstrong replaced Alan Crutchfield as past president, Gordon Shufelt moved up from first vice-president to president, and three men, new to the executive, were elected.

It was the view of the Council that the provincial movement would be vitalized by a system of rotating officers; thus three of the pioneers of the Farm Forum gladly moved off the Executive for the first time since its organization (P. D. MacArthur, Alan Crutchfield, and Alex Sim) to give others the privilege of working on the Council, and serving the interests of farm people.

The New Council

Each spring the counties which have at least five Farm Forums within their boundaries meet to elect their representative to the Council. After the annual meeting, the new Council meets to elect its executive, and any additional directors who for reason of their experience are felt to be needed to add strength and prestige to the organization. The executive elects its secretary-treasurer.

Here are the officers and directors who will hold office to June 1948:

Honourary President: . . . Dr. W. H. Brittain
 President Gordon Shufelt
 1st Vice-President Ronald MacKechnie
 2nd Vice-President Carl B. Corey
 Secretary-Treasurer . . . Floyd Griesbach
 Past President Stuart Armstrong
 Executive Member J. D. Lang

MEMBERS:

Argenteuil Douglas Bradford
 Brome Gordon Shufelt
 Chateauguy J. D. Lang
 Compton J. D. Harrison
 Gatineau Miller Gibson
 Huntingdon R. J. M. Reid
 Mississquoi Neil F. Creller
 Pontiac Ronald MacKechnie
 Richmond H. A. Fowler
 Rouville-Shefford Sidney Fisk
 Sherbrooke Lawrence Copping
 Stanstead Carl B. Corey

MEMBERS AT LARGE:

Allan Crutchfield W. G. MacDougall
 P. D. MacArthur Mrs. Donald McElrea
 Stuart Armstrong

Farm Forums Want Action On Feed

The annual meeting of the Quebec Council of Farm Forums passed with applause the resolution backing the action already taken by the Canadian Federation of Agriculture with respect to the feed grain issue:

"Following a conference on the feed grain situation called by the Canadian Federation of Agriculture at Ottawa, June 11, recommendations were submitted to the federal minister of agriculture, Honourable J. G. Gardiner, on June 12, by a delegation of federation directors from east and west. These recommendations were as follows:

"That the present price structure on feed grains—floors and ceilings and drawbacks—be continued until at least July 1, 1948.

That plans be made as early as possible for the movement of the normal supply of feed grains into Eastern Canada and British Columbia.

And that in view of the emergency in Eastern Canada, special measures be instituted to move the necessary additional supplies of feed grains from Western Canada to Eastern Canada before freeze-up, in order to build the largest possible grain bank in both elevators and farmers' bins to meet the emergency. Unless extraordinary measures such as these are taken said the delegation, Canadian consumers will suffer shortages of some farm products and face the danger of high prices in some instances; and further Canada may fall down badly in her export commitments."

New Forum Secretary

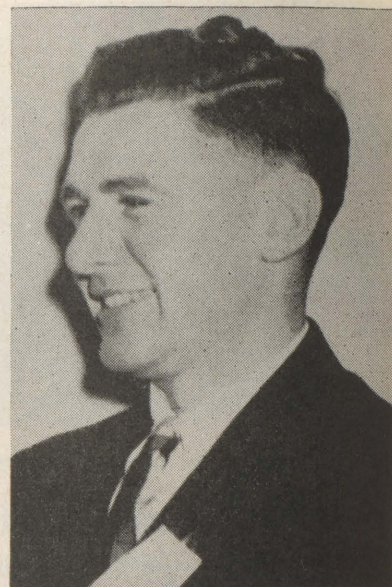
Floyd Griesbach of Collingwood, Ontario,—recently appointed secretary of Quebec Farm Forums to succeed Joe Galway — has already had a career as a leader in the Farm Movement. He has been a director of the Ontario Federation of Agriculture for four years, representing farm young people.

He was president of the United Farm Young People

of Ontario for three years, president of Nottawa Junior Farmers Ass'n for one year, and part-time field man and projectionist for Simcoe County Federation of Agriculture for three years.

Secretary of Col-Co-operative, Mr. Griesbach has been a director of Georgian View Credit Union and Simcoe county Co-operative Health Services.

Quebec Farm Forum people will give him a good welcome when he takes over his new job in the late summer.



Adult Camp Moves to Laurentians

The School of Community Programs, popularly known as Laquemac, is a ten day adult camp school for the training of professional and volunteer workers in adult education and community programs. It is administered jointly by Laval and McGill Universities. Founded in 1941 as Camp Macdonald, to serve as a local training ground for rural English speaking leaders in the Eastern Townships, it has broadened its scope since then to include those who work in rural, urban and industrial areas and has drawn students from a wide variety of experience in social work, teaching, film and radio procedures, town planning, writing and administration.

Owing to difficulty in securing adequate accommodations in the Eastern Townships, the camp will move to campsite in the Argenteuil section of the Laurentians at Lake Chapleau, about 12 miles distance from Arundel, on the C.N.R.

Programme

The programme will appeal to that large and important group of people who are working in the community as volunteers. Group work and community organization methods are analyzed in relation to emerging programs in mass education, particularly in the use of radio and the film, while there is ample opportunity to learn and practise skills that are useful in community work. A feature of special interest is the bilingual nature of the School.

Students may register for one of the four SEMINARS, the first a general course in the Principles of Community Work, the other three dealing specifically

with Adult Education methods in (1) the Rural Community, (2) Urban Organization, (3) Industrial areas. Students may also register for one of the eight SKILL SESSIONS: (1) Recreation (2) Dramatics, (3) Community Singing, (4) Discussion Methods, (5) Parliamentary procedure, (6) Committee work, (7) Visual publicity, (8) Written publicity. Each evening the participants of the Skill Sessions present a program which deals with some of the problems which are central to the theme of the School.

The periods of instruction are intensive, but there is also time to enjoy the Laurentians, and to learn through association with people from a wide experience in the fields of instruction.

Those wishing to pursue work for credit with the Adult Education Department of Teachers' College, Columbia University, while enrolled at the School, may do so.

Costs: \$1.00 for registration. Tuition and board for the full session \$35.00. A number of scholarships, which cover the full cost of transportation, and \$20.00 applied on board and tuition, (Those under 36 years of age, and resident in the Province of Quebec may apply.) are available through the courtesy of the Youth Training Plan of the Province of Quebec. For full particulars write one of the Co-Directors:

Eugène Bussière, Service Extérieur d'Education Sociale, Université Laval, Québec.

R. Alex Sim, Adult Education Service, McGill University, Macdonald College, P.Q.



THE COLLEGE PAGE

Teachers and Homemakers Graduate

On June 5th the graduation exercises of the School for Teachers and the School of Household Science were held in the College Assembly Hall, and with the departure of the teachers and the homemakers, the academic session of 1946-47 officially ended.

Principal James presided over the ceremonies and distributed Homemaker certificates to twenty-four successful candidates; the Director of Protestant Education for the Province of Quebec, Dr. W. P. Percival, presented certificates to the candidates in the School for Teachers. Also present to receive High School certificates were a number of graduates of the McGill Department of Education who were presented by Prof. John Hughes, Chairman of the Department.

In the School for Teachers, forty-three intermediate certificates, forty-six elementary certificates and four kindergarten director's certificates, were awarded. These new teachers will take up their duties in the schools of this province in September, but as was pointed out by Dean Laird in his report, many more teachers should be graduating every year if there is to be anything like a sufficient number of teachers for the needs that exist.

Prizes in the School for Teachers were won by a number of students. We would have liked to photograph them all, but had to limit ourselves to those students

who earned more than one. In the first photograph below are, from left to right, Miss Lois Chapman of Campbellton, N.B., who won the prize in Physiology and Hygiene, and the medal for Arithmetic; Mr. Gerald Bennett of Bishopton, P.Q., winner of the Gardner Kneeland Memorial Prize in English, the Superintendent of Education's medal and the Dr. S. P. Robins Memorial Prize, and Miss Mary Poole of Verdun, P.Q., who came first in the Intermediate Class, and won the prize in the Art of Teaching.

In the centre picture are Miss Lillis Nicholson of Bedford, P.Q., awarded the Hon. Jacob Nicol Prize and the Sarah Emma Hill Scholarship, which she shared with Marjorie Edwards of Escuminac, P.Q., and Miss Verna Gilbert of Bishopton, P.Q., who led the Elementary Class and was awarded the Bishop of Montreal's Prize.

All the prizes in the Homemaker Class were won by the three girls in the last picture. Miss Patricia Ellis of Ottawa won the Dr. John L. Todd Silver Medal. Miss Gay Watt of Ste. Anne de Bellevue, P.Q., won the Dr. John L. Todd Nickel Medal and shared the prize offered by the Montreal Local Council of Women with Miss Margaret Philp of Nanaimo, B.C., who also won the Governor General's Medal for leading the class.



Some of the prize winners in the School for Teachers and the Homemaker Course.

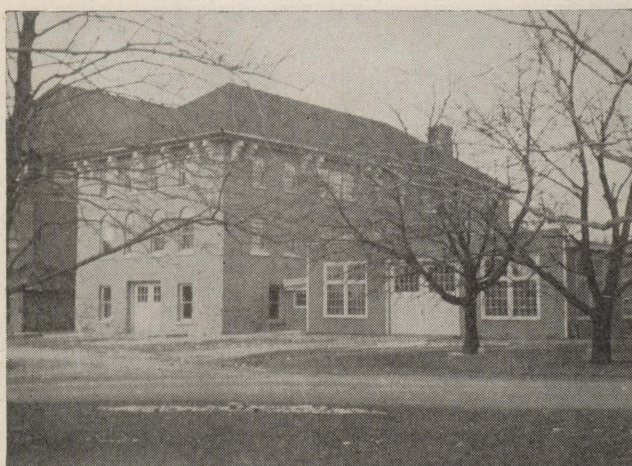
Macdonald College Entertains

Farm Day is the occasion when Macdonald College holds open house for visitors. It is held yearly toward the end of June and all the departments of the College make a special effort to set up displays and arrange tours and demonstrations so that members of the farming communities, and anyone else interested, may visit the farm and the grounds, peer into laboratories and classrooms, and get a better idea of how Macdonald College serves the community.

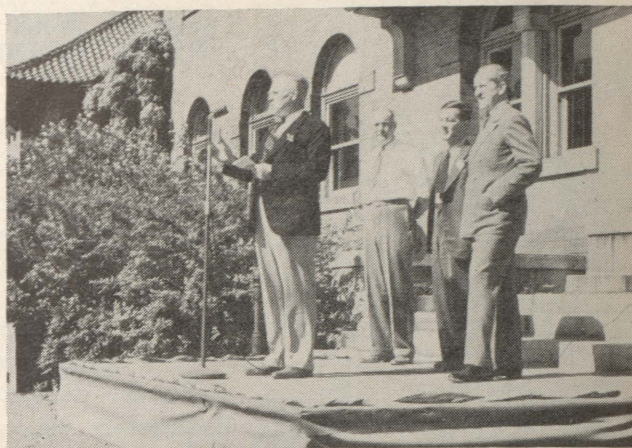
Farm Day coincided with the annual meeting of Farm Forums, and other guests included members of the Montreal Local of the Agricultural Institute of Canada, to whom special invitations had been sent, representatives of industrial firms interested in agriculture, and some thirty farmers from Ontario who had spent the previous week making a tour of co-operatives in Quebec and who had planned their trip so that the Saturday could be spent at Macdonald College. In all, well over one hundred visitors were present. Arrangements were made for picnic lunches on the lawns, and those who had not brought their own food had lunch in the dining room. In the afternoon, organized tours were arranged through the departments of agronomy, animal husbandry, agricultural engineering, poultry, horticulture and the School of Household Science. In order that all the ground could be covered in the one afternoon, the guests were asked beforehand to register for the tour in which they were particularly interested, and all the tours were held simultaneously.

New Buildings Opened

Two additions have been made to the College plant during the past year. These are a new building for the Department of Agricultural Engineering, and a new



The new Agricultural Engineering Building which was formally opened on June 21st.



Flanked by, from left to right, Prof. H. R. Murray, Prof. J. H. Cooper and Mr. Ross Clarkson. Dean Brittain describes the new buildings which were later officially opened by Mr. Clarkson.

cold storage and quick freezing installation in the Department of Horticulture, both of which will fill an urgent need. For a number of years the Agricultural Engineering Department have been occupying quarters in various parts of the College—first in the Main Building, and later, during the period when the C.W.A.C. training centre was in operation, in the Agriculture Building. Expanding needs of the College made it imperative that suitable quarters be found for Agricultural Engineering, especially in view of the fact that this is now a subject of specialization in third and fourth years, and also on account of the demands upon space made by the special course in rural repair shop mechanics being offered for ex-service men. The new building, as can be seen in the photograph, is large enough to meet the needs of the department for many years to come.

In the cold storage plant of the Department of Horticulture, experimental work on apple storage in connection with various fertilizer, cultural and variety trials can be conducted, and experiments in quick freezing, which is becoming more and more important with the introduction of home frozen food lockers, can be conducted. Quite apart from its value for this type of work, the cold storage plant will enable the Department to store its crops during the fall and early winter and market them at the most advantageous times.

At a ceremony on the afternoon of Farm Day the buildings were officially opened by Mr. Ross Clarkson, a member of the Board of Governors of McGill University, who presented the keys of the new buildings to Prof. Murray, Chairman of the Department of Horticulture, and Prof. Cooper, who acted for Prof. Heimpe, Chairman of the Department of Agricultural Engineering.

Long-Range Farm Policy in the U.S.

by J. S. Cram

The way the United States is setting out to ensure prices and markets for farm products will be of interest to Canadian farmers. So here's an excerpt from a recent address on this subject by Clinton Anderson, U.S. Secretary of Agriculture, before the Committee on Agriculture of the U.S. Congress:

"I want to outline what I believe to be the one practical policy for American agriculture—a policy of organized, sustained, and realistic abundance. I want to show you the opportunity we have now, at long last, to establish and maintain a balance between consumption and the sound capacity output of our agricultural plant. This is an opportunity not only to serve the general welfare but also, and not incidentally, to serve the best interests of U.S. farm people.

"In order to show you this opportunity for a balanced program, it will be necessary for me to cover three points: (1) how much food and fiber we need or can reasonably expect to use, (2) what those needs mean in terms of farm acreage and types of farming, and (3) what programs may be needed to help maintain balance between commodity requirements and production. . .

"For the sake of brevity and practicality, let us put aside the matter of what we ought to have—either for good diets or good business. Let us look at the measurable wants of the people in this country—what people really want to buy. We can judge this from the actual buying habits of people who have comparatively good incomes. What would you call the lower limit of a reasonably good family income? Under 1941 prices, would \$2,000 per family be too much? That's less than \$40 a week per family. But back in 1941, the families that had incomes of that much or more were approximately the top 40%. At least, most of the families with prewar incomes of \$2,000 or more could afford a generally adequate diet. So let's assume their buying represents what the people of the United States want, and apply their buying habits to the whole population.

"This indicates that people want about 40 pounds more meat per capita than they were getting between 1937 and 1941; they want over 200 pounds apiece more milk, about 9 pounds more chicken, 23 or 24 pounds more fresh vegetables, around 17 pounds more processed vegetables, an additional 50 pounds of citrus fruit, and over 80 pounds more of other fruits. They apparently want a little less of beans and would continue the gradual, long-time trend toward lower per capita use of potatoes. I believe it is safe to assume that they would buy more products made from cotton, tobacco and wool although we do not have the precise measure

for these products that compare with those I have just given for food.

"Now let's see what these wants mean in terms of farm acreages and types of farming. Total up the wants of our own people, add in conservative amounts for exports, imports, and industrial uses, allow for good yields, and here's the picture: We would need more than 420 million acres for crops, orchards, rotation pasture and fallow land. That is almost exactly what our production goals call for this year. It's around 10 million acres higher than the comparable figure for last year or for the 1937-41 average. It's the continuing acreage we would need if people of reasonable income could buy what they have shown they want.

"Our estimate of needed acreage of course allows for average weather and a continuing trend toward more efficient production. The 420 million acres we would need to meet our own personal wants, plus peacetime exports and industrial uses, would be divided up quite a bit differently from prewar and even from last year's use of the land. Emphasis would be on livestock farming. This would mean more land in pasture and hay, less in small grains and potatoes and beans, not much change in feed grain acreage. There would be less land in soybeans than we had last year but more in truck crops, more in cotton, and more in orchards. . .

"Altogether, direct payments to farmers from 1933 through 1941 added more than one-eighth to farm operators' net income. In two years payments added nearly one-fifth to the net income farm operators otherwise had.

"We the people have paid in money and in soil fertility. We always pay for abundance. It's high time we started getting what we pay for. That is why I appeal to the Congress to adopt the goal of organized, sustained, and realistic abundance as our national agricultural policy."

Population, income and acreage in Canada are lower, but the buying trends appear to be similar. So Mr. Anderson's statement gives an interesting outline which could be used as a guide in figuring out what kind of long-time policy Canadian agriculture needs.

Farmstead Clean-Up to Rout Rats

One of the most profitable ways a farmer can spend a few spare hours is to conduct a clean-up campaign around his farmstead.

By so doing he will have taken the first step necessary for getting rid of rats and flies. Rats live and multiply in such places as lumber and fence posts piled on the ground, in garbage, stack rooms and cob piles.



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sign of modern protection...

It is the final aim of Green Cross to provide Canadians with the instruments for *complete*, modern pest control. To date, Green Cross offers an extensive line of products that represent the latest discoveries in entomology, plant pathology and chemistry. These products are developed in Green Cross laboratories . . . tested at Green Cross experimental stations . . . and backed by the combined technical and research facilities of the largest insecticide organization in the world.

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